

# Study Plan

**School:** School of Social Sciences

**Degree:** Master

Course: Economics (cód. 607)

# 1st Year - 1st Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Macroeconomics	Economy	6	Semester	156
ECN11906M					
	Microeconomics	Economy	6	Semester	156
ECN11908M					
	Econometrics	Economy	6	Semester	156
ECN11907M					

\*\*\* TRANSLATE ME:Optativas I \*\*\*

Component code	Name	Scientific Area Field	ECTS	Duration	Hours	
	International Trade	Economy	6	Semester	156	
ECN11988M						
	Economic Growth	Economy	6	Semester	156	
ECN11989M						
	Economic and Social Development	Economy	6	Semester	156	
ECN11990M						
	Regional Development	Economy	6	Semester	156	
ECN11991M						
	Public Economics	Economy	6	Semester	156	
ECN11992M						
	Urban Economics	Economy	6	Semester	156	
ECN11993M						
	Labour Economics	Economy	6	Semester	156	
ECN11994M						
	Monetary Economics and Monetary Policy	Economy	6	Semester	156	
ECN11910M						
ECN4400-14	An Introduction to General Equilibrium Models	Economy	6	Semester	156	
ECN11995M		<u> </u>	_	_		
ECNICACIONA.	Economic and Financial Modelling	Economy	6	Semester	156	
ECN11912M					1-0	
ECNICA COOM	Foundations of Economic Analisys	Economy	6	Semester	156	
ECN11909M	La Caracia de la					
*** IRANSLATE	ME:Optativa livre ***					

# 1st Year - 2nd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
	Economic Decision Analysis	Economy	6	Semester	156
ECN11987M					
	Research Methodologies	Economy	6	Semester	156
ECN11913M					



### 1st Year - 2nd Semester

* TRANSLATE M Component code	Name	Scientific Area Field	ECTS	Duration	Hours
ECN11988M	International Trade	Economy	6	Semester	156
ECN11989M	Economic Growth	Economy	6	Semester	156
ECN11990M	Economic and Social Development	Economy	6	Semester	156
ECN11991M	Regional Development	Economy	6	Semester	156
ECN11992M	Public Economics	Economy	6	Semester	156
ECN11993M	Urban Economics	Economy	6	Semester	156
ECN11994M	Labour Economics	Economy	6	Semester	156
ECN11910M	Monetary Economics and Monetary Policy	Economy	6	Semester	156
ECN11995M	An Introduction to General Equilibrium Models	Economy	6	Semester	156
ECN11912M	Economic and Financial Modelling	Economy	6	Semester	156

### 2nd Year - 4th Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Dissertation					
Report					
Project Work					

# 2nd Year - 3rd Semester

Component code	Name	Scientific Area Field	ECTS	Duration	Hours
Dissertation					
Report					
Project Work					

# Conditions for obtaining the Degree:

\*\*\* TRANSLATE ME:

Para aprovação neste mestrado é necessário a aprovação (através de avaliação ou creditação) das seguintes unidades curriculares (a partir do ano letivo 2022/23 de acordo com registo na DGES em 29/4/2022):

10 semestre

3 ucs obrigatórias num total de 18 ects

2 optativas num total de 12 ects a escolher entre as optativas do plano de estudos disponíveis, podendo 6 ECTS ser optativa livre na Área Científica de Economia. Nesses 12 ECTS, o estudante poderá ser aconselhado pela CEA na admissão ao mestrado a frequentar a UC Fundamentos de Economia.

2<sup>o</sup> semestre

 $2\ \mathsf{ucs}$  obrigatórias num total de  $12\ \mathsf{ects}$ 

18 ects em ucs optativas a escolher entre as optativas do plano de estudos disponíveis, podendo 18 ECTS ser em optativas livres na Área Científica de Economia

3<sup>o</sup> e 4<sup>o</sup> semestre

Dissertação/Trabalho de Projeto /Estágio Profissional 60 ects \*\*\*



# **Program Contents**

#### Back

### Macroeconomics (ECN11906M)

- 1-Demand management policies in a open-economy framework.
- 2 Government deficit and public debt.
- 3- The labor market, the Phillips curve debate and the dynamic aggregate supply
- 4- The complete model
- 5- The business cycles: the new Keynesian economics and the Theory of Real Business Cycles.
- 6- The long run: from neoclassical growth models to the endogenous growth.
- 7- New frontiers for macroeconomics

#### Back

### Microeconomics (ECN11908M)

- 1. Individual consumption and production choices
- 2. Equilibrium in competitive markets
- 3. Market failures: externalities and public goods; information asymmetries; market power
- 4. Game theory

#### Back

### **Econometrics (ECN11907M)**

- I. Linear Regression Model: Specification, Estimation and Inference; Endogenous Regressors.
- II. Nonlinear Models: Estimation and Inference; Models with discrete dependent variable
- III. Panel Data Models: Fixed and Random Effects Models; Dynamic Models.
- IV. Time Series Models: Univariate and Multivariate Models; Unit roots and Cointegration.

#### Back

## International Trade (ECN11988M)

- 1. World trade: patterns of specialization, recent and prospective trends.
- 2. The International Economic Order and the International Trade Organizations. The Legal Framework of World Trade: The GATT and the WTO
- 3. Analysis of statistical data on international trade: indicators of the internationalization of economies and companies.
- 4. The economics of international trade: from the classical approach to the new "empirical" models of trade.
- 5. Foreign Trade Policy tariff and non-tariff restrictions on trade and their economic effects.
- 6. Protectionism versus Free Trade Arguments.
- 7. Strategic Trade Policy: from business integration to regional integration
- 8. Regionalism and multilateralism: Major regional trade blocs.
- 9. Public policies to encourage exports.
- 10. Basic instruments for the development of the Export / Import activity.



## **Economic Growth (ECN11989M)**

Part 1: Introduction

- 1.1 Stylized facts
- 1.2 The Solow-Swan model
- 1.3 absolute and conditional convergence.

Part 2: The neoclassical growth model.

- 2.1 Economic Growth with infinite time horizon and optimizing agents: the model of Ramsey-Cass-Koopmans;
- 2.2 Human capital and economic growth
- 2.4 1st generation endogenous growth models

One-sector models of economic growth; the AK model, Leaning-by-doing, and knowledge spillovers;

Two-sector models of economic growth: The Lucas-Uzawa and the Nelson-Phelps models.

The scale effects (Jones and Mankiw)

Economic growth in the context of open economy

Part 3: Economic Growth, Natural Resources and Sustainability

- 3.1 Endogenous Growth and Sustainability:
- 3.2 The Environmental Kuznets Curve and the Green account

#### Back

### **Economic and Social Development (ECN11990M)**

1.Introduction:Definition of economic development. Poverty and social exclusion.WB Indexes. Absolute & relative welfare. Equity and efficiency. Poverty, under-nutrition and famines

2. Economic development behavioural analysis. 2i) Theories: Households and development. Land market: a key issue. Credit and rural markets: micro-credit and fragmented markets. Human capital and income distribution.

Poverty reduction: efficiency and equity. Technical progress and learning in development. Environment.

- 2ii) Applied cases: human capital. Property rights and incentives. The case for African development.
- 3. Some examples of development public policies: The role of the State, the Market and international NGO's in development.
- 4. The role of institutions: Entitlements and capabilities as constitutive elements. Accountability. Political & economic factor in development. Theory of the firm, endogenous transaction costs. Neo-institutionalist approach. Culture and development. Limits to economic analysis

## Back

### Regional Development (ECN11991M)

Introduction.

- 1. Regional development policies.
- 2. Place-based and place-blind public policies.
- 3. Clusters, learning processes and regional development.
- 4. Growth, location and regional dinamics.
- 5. Regional innovation and growth dynamics.
- 6. Regional networks and knowledge spillovers.
- 7. Creative cities and territorial based knowledge management.

Conclusions.



### **Public Economics (ECN11992M)**

- 1. The Role and Size of the Public Sector
- 1.1. Politico-economic theories of the State
- 2. Fundamentals of Welfare Economics
- 2.1. Public goods
- 2.2. Externalities
- 2.3. Efficiency and equity
- 2.4. Public choice
- 3. Public Expenditures
- 4. Public Revenues
- 5. Public Sector Policies
- 5.1. The public policies

#### Back

### **Urban Economics (ECN11993M)**

- 1. Introduction
- 1.1. Urban economics as a course
- 1.2. The role of urban centers in the economy
- 1.3. Economic development and urbanization
- 2. Urban systems
- 2.1. The central places theory and the concept of urban hierarchy
- 2.2. From the concept of urban hierarchy to the urban network
- 2.3. The concept of utility in the definition of urban systems
- 2.4. Empirical evidence on the evolution of urban systems
- 3. Use of urban space
- 3.1. Location of economic activities
- 3.2. Economic fundamentals of the center(s)
- 3.3. The residential location
- 4. Urban growth and contemporary issues
- 4.1. Urban growth factors
- 4.2. Urban environment and sustainability
- 4.3. Economic and social inequalities in urban space
- 5. Public policies in urban space
- 5.1. The physical expansion of the city and the control of urban land
- 5.2. Tax policy and location choice
- 5.3. Public services supply
- 5.4. Social policies and policies on environment
- 6. Research methods applied to the study of cities

#### Back

### Labour Economics (ECN11994M)

Labour Supply. Labour Demand. Competitive equilibrium and compensating wage differentials. Education and Human Capital. Wage inequality. Labour mobility. Labour market discrimination. Unemployment.



# Monetary Economics and Monetary Policy (ECN11910M)

Foundations of monetary theory; Theory of interest rates; Fiscal discipline as the guarantor of monetary stability; Transmission channels of monetary policy; Rules versus discretion in monetary policy; Objectives, indicators and instruments; Monetary policy strategies; The Monetary Policy of the European Union

### Back

## An Introduction to General Equilibrium Models (ECN11995M)

- 1. An overview of General equilibrium theory
- 2. Introduction to general equilibrium models and their elements
- 3. Simple general equilibrium models
- 4. General equilibrium models with government
- 5. General equilibrium models with external sector
- 6. Other extensions to general equilibrium models
- 7. Real examples of the application of general equilibrium models

### Back

### **Economic and Financial Modelling (ECN11912M)**

- 1. Microeconometric applications: limited dependent variable models, count data models.
- 2. Time Series Analysis: ARMA models and auto-regressive vectors; multivariate cointegration; ARCH and GARCH models for volatility in financial data.

#### Back

### Foundations of Economic Analisys (ECN11909M)

- 1. Introduction
- 2. Fundamental notions of algebra and topology
- 3. Equations, inequalities, derivatives and integrals
- 4. Differential equations and equations for differences
- 5. Linear Algebra
- 6. Statistics
- 7. General and partial equilibria
- 8. Game theory



### **Economic Decision Analysis (ECN11987M)**

- 1. DECISION ANALYSIS UNDER A STATIC CONTEXT
- 1.1 The Certainty Situation
- 1.1.1. Decision Theory
- 1.1.2. Economic applications/Specific cases
- 1.2. The Risk Situation
- 1.2.1. Decision Theory
- 1.2.2. Economic applications/Specific cases
- 1.3. The Uncertainty Situation
- 1.3.1. Decision Theory
- 1.3.2. Economic applications/Specific cases
- 2. DECISION ANALYSIS UNDER A DYNAMIC CONTEXT
- 2.1. The Discrete Time Situation
- 2.1.1. Decision Theory
- 2.1.2. Economic applications/Specific cases
- 2.2. The Continuous Time Situation
- 2.2.1. Decision Theory
- 2.2.2. Economic applications/Specific cases

#### Back

### Research Methodologies (ECN11913M)

- 1. THE METHODOLOGY OF THE RESEARCH PROCESS: Theoretical Aspects
- 1.1. Science and the Scientific Method: general aspects
- 1.2. Brief Analysis of the Evolution of Scientific Method: the particular cases of Economics and of Public Policies and Projects
- 2. THE METHODOLOGY OF THE RESEARCH PROCESS: Practical Aspects
- 2.1. Academic Research: objectives, types and general characteristics
- 2.2. Brief Reflections on the Writing and Graphic Styles
- 2.3. The Choice of the Theme and Supervisor(s) of the Dissertation: some recommendations
- 2.4. The Usual Components of a Research Project
- 2.5. The Operationalisation of the Research Project
- 2.6. A Proposed Structure for a Master's Dissertation
- 2.7. The Presentation / Defence of the Dissertation
- 3. THE METHODOLOGY OF THE RESEARCH PROCESS: Examples of Application