



## Economics (MSc)

Vrije Universiteit Amsterdam - School of Business and Economics - M Economics - 2017-2018

The Master's in Economics has been developed for the prospective professional economist who aims to pursue a career either in the public or the private sector. It teaches you the essentials of modern economic theory and data analysis and how to apply them to everyday problems. Areas of focus include poverty and inequality, financial markets, economic growth and the environment.

The Master's programme in Economics is a high quality one-year programme consisting of 60 EC, which teaches students the knowledge and skills of professional economists. In particular, the programme equips students with the essential tools of economics, shows how these tools should be applied in real life societal and market challenges and discusses which (policy) conclusions can be drawn. Students learn to understand the academic literature and identify the key contributions in the field of economics. They learn to work in groups as well as independently and they learn to present their research findings both to expert and non-expert audiences.

To support successful participation in the master's programme in Economics, we refresh knowledge of mathematics (derivatives, Lagrange multipliers and matrix algebra) and programming (econometrics and data management using software Stata) in the last week of August. Students with a valid VUnet ID can then get access to all of the course materials on Canvas.

The Master's programme in economics has two tracks. The first is the programme in Public Policy, which focuses on how economists should advise policy makers to deal with the main societal challenges related to urbanization, globalization, inequality, climate change and the welfare state. The programme in Public Policy has a fixed curriculum without electives. The second track is the regular programme in Economics. By choosing a fixed combination of electives, in combination with a suitable thesis topic, you can opt for one of the four areas of specialization (Development Economics, Global Challenges, International and Macroeconomic Policy, or Labour and Health). However, as specializations are optional combinations of courses, you may freely pick and mix elective courses from the four specializations, and from an extended list of courses, possibly to broaden their academic interest rather than studying one specialization in depth. In this case, no specialization will be mentioned on the diploma supplement. In addition, one of the three elective courses may be chosen from outside this list, for instance from related, other master-level courses and courses taught outside the faculty. This choice is subject to prior approval by the examination board.

The MSc Economics is a one year full-time programme, is taught in English, comprises 60 EC, and consists of several specializations.

[-General information](#)

[-Course schedule](#)

[-Specialization Public Policy](#)

[-All other specializations](#)

[-Academic and Examination Regulations \(OER\) SBE Master's degree programmes](#)

[-Regulations and Guidelines](#)

[-Academic year calendar](#)

[-Transitional arrangements due to curriculum changes \(document will be published soon\)](#)

[-VUnet & Services](#)

## Inhoudsopgave

Master Economics - Specialization Development Economics	1
Master Economics - Core courses	1
Master Economics - Specialization Development Economics - Obligatory courses	1
Master Economics - Additional Electives	2
Master Economics - Specialization Global Challenges	2
Master Economics - Core courses	3
Master Economics - Additional Electives	3
Master Economics - Specialization Global ChallengesMaster Economics - Obligatory courses	4
Master Economics - Specialization International and Macroeconomic Policy	4
Master Economics - Core courses	5
Master Economics - Additional Electives	5
Master Economics - Specialization International and Macroeconomic Policy - Obligatory courses	6
Master Economics - Specialization Labour and Health	6
Master Economics - Core courses	6
Master Economics - Additional Electives	7
Master Economics - Specialization Labour and Health - Obligatory courses	7
Master Economics - Specialization Public Policy	8
Master Economics - No specialization	8
Master Economics - Core courses	9
Master Economics - Additional Electives	9
Vak: Advanced Macroeconomics (Periode 2)	10
Vak: Advanced Methods for Applied Economic Research (Periode 1)	11
Vak: Advanced Microeconomics (Periode 1)	12
Vak: Economics of Climate Change (Periode 2)	13
Vak: Economics of the Welfare State (Periode 2)	15
Vak: Environmental Economics (Periode 4)	16
Vak: Globalization, Growth and Development (Periode 4)	18
Vak: Human Development (Periode 4)	19
Vak: Industrial Organization and Competition Policy (Periode 4)	21
Vak: Labour Economics (Periode 4)	22
Vak: Macro and International Finance (Periode 4)	23
Vak: Macroeconomic Policy in the EU (Periode 2)	24
Vak: Microeconomics and Methods (Periode 1)	26
Vak: Microeconomics for Development (Periode 2)	28
Vak: Policy Seminars and Policy Brief (Periode 3)	29
Vak: Public Economics and Policy (Periode 1)	30
Vak: Research Project Economics (Periode 3)	31
Vak: Thesis MSc Economics (Ac. Jaar (september))	32
Vak: Thesis MSc Economics - Public Policy (Ac. Jaar (september))	34
Vak: Time Series Econometrics (Periode 4)	35
Vak: Urban Economic Challenges and Policies (Periode 4)	36

## Master Economics - Specialization Development Economics

Development Economics applies basic tools of economics to key policy issues in developing countries and transition economies. This specialization discusses topics like: the role of constraints (for example through exposure to risk) on the ability of households to escape from poverty through asset accumulation; the potential for sustainable land use in areas with rapid population growth; the economic implications of migration, both within developing countries and from developing to developed countries; and the scope for economic growth through industrial development. These topics, along with aggregate aspects of growth and inequality, and broader issues of human development, shape the curriculum of the Development Economics specialization. There is also close cooperation with the University of Amsterdam, where some teaching takes place.

The approach is strongly empirical, using case studies or survey data for individual households or firms to test competing theories and to evaluate the impact of implemented policy initiatives and specific development projects.

The programme contains core courses, specialization courses and electives.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [Master Economics - Specialization Development Economics - Obligatory courses](#)
- [Master Economics - Additional Electives](#)

### Master Economics - Core courses

Four core courses plus a thesis are obligatory within the specializations Developmental Economics, Global Challenges, International and Macroeconomic Policy, and Labour and Health.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Advanced Macroeconomics</a>	Periode 2	6.0	E_EC_AMAEC
<a href="#">Advanced Methods for Applied Economic Research</a>	Periode 1	6.0	E_EC_AMAER
<a href="#">Advanced Microeconomics</a>	Periode 1	6.0	E_EC_AMIEC
<a href="#">Research Project Economics</a>	Periode 3	6.0	E_EC_RPEC
<a href="#">Thesis MSc Economics</a>	Ac. Jaar (september)	18.0	E_EC_THS

### Master Economics - Specialization Development Economics - Obligatory courses

Within this specialization, 2 courses are obligatory.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Microeconomics for Development</a>	Periode 2	6.0	E_EC_MED

## Master Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 2	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Environmental Economics</a>	Periode 4	6.0	E_STR_EEC
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Human Development</a>	Periode 4	6.0	E_EC_HDEV
<a href="#">Industrial Organization and Competition Policy</a>	Periode 4	6.0	E_EC_IOCP
<a href="#">Labour Economics</a>	Periode 4	6.0	E_EC_LABEC
<a href="#">Macro and International Finance</a>	Periode 4	6.0	E_FIN_MIF
<a href="#">Macroeconomic Policy in the EU</a>	Periode 2	6.0	E_EC_MPEU
<a href="#">Microeconomics for Development</a>	Periode 2	6.0	E_EC_MED
<a href="#">Time Series Econometrics</a>	Periode 4	6.0	E_EORM_TSE
<a href="#">Urban Economic Challenges and Policies</a>	Periode 4	6.0	E_STR_UECP

## Master Economics - Specialization Global Challenges

This specialization, Global Challenges, studies economic aspects of pressing global issues. Course work straddles areas of environmental policy, global warming and climate change, but also the division between Northern countries and the developing world, affecting life and decisions of billions (poverty, access to health and education, migration). All courses feature the application of relevant theoretical and empirical insights to practical issues. You will learn to use modern tools of analysis to investigate potential solutions and formulate policy recommendations. Global challenges are much wider, and thesis work can further delve into issues of, for instance, global diffusion of technical change and innovation, international tax and welfare competition, or international political economy.

The specialization is jointly supported by teaching staff from the Department of Economics and of Spatial Economics. Both host internationally renowned staff, all actively participating in national and international economic policy debates. After completing course work and thesis you are well equipped for a career as a policy economist in international or national government agencies such as the European Commission or ministries, policy analysis institutions, internationally operating consultancy firms, or NGOs.

The programme contains core courses, specialization courses and electives.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [Master Economics - Additional Electives](#)
- [Master Economics - Specialization Global Challenges](#) [Master Economics - Obligatory courses](#)

## Master Economics - Core courses

Four core courses plus a thesis are obligatory within the specializations Developmental Economics, Global Challenges, International and Macroeconomic Policy, and Labour and Health.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Advanced Macroeconomics</a>	Periode 2	6.0	E_EC_AMAEC
<a href="#">Advanced Methods for Applied Economic Research</a>	Periode 1	6.0	E_EC_AMAER
<a href="#">Advanced Microeconomics</a>	Periode 1	6.0	E_EC_AMIEC
<a href="#">Research Project Economics</a>	Periode 3	6.0	E_EC_RPEC
<a href="#">Thesis MSc Economics</a>	Ac. Jaar (september)	18.0	E_EC_THS

## Master Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 2	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Environmental Economics</a>	Periode 4	6.0	E_STR_EEC
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Human Development</a>	Periode 4	6.0	E_EC_HDEV

Industrial Organization and Competition Policy	Periode 4	6.0	E_EC_IOCP
Labour Economics	Periode 4	6.0	E_EC_LABEC
Macro and International Finance	Periode 4	6.0	E_FIN_MIF
Macroeconomic Policy in the EU	Periode 2	6.0	E_EC_MPEU
Microeconomics for Development	Periode 2	6.0	E_EC_MED
Time Series Econometrics	Periode 4	6.0	E_EORM_TSE
Urban Economic Challenges and Policies	Periode 4	6.0	E_STR_UECP

## Master Economics - Specialization Global Challenges

### Obligatory courses

Within this specialization, 2 courses are obligatory.

Vakken:

Naam	Periode	Credits	Code
Economics of Climate Change	Periode 2	6.0	E_STR_ECC
Globalization, Growth and Development	Periode 4	6.0	E_EC_GGD

## Master Economics - Specialization International and Macroeconomic Policy

The specialization International and Macroeconomic Policy focuses on trade, growth and coordination of fiscal and monetary policy. This specialization builds upon foundations of advanced macroeconomics: What determines long-run growth and productivity; what is the use of fiscal and monetary policy for economic stabilization?

Specialization courses discuss, inter alia, strategies in coordination and cooperation needed to maintain and promote the integration of Europe: How are tasks divided between EU and national authorities, can the Euro area be stabilized and is further expansion desirable? Another area focuses on growth in developing nations: What role do institutional (social and political) factors play in promoting growth, how do incentives affect savings and investment of households and firms, and what is the impact of foreign aid on development? Finally, insight is given into the drivers of growth in industrialized countries, specifically the strategies of firms to boost innovation and growth, and the role of policy.

Our highly reputable teaching faculty has an international track record in academia, central banking, and policy advice.

The programme contains core courses, specialization courses and electives.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [Master Economics - Additional Electives](#)
- [Master Economics - Specialization International and Macroeconomic Policy - Obligatory courses](#)

## Master Economics - Core courses

Four core courses plus a thesis are obligatory within the specializations Developmental Economics, Global Challenges, International and Macroeconomic Policy, and Labour and Health.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Advanced Macroeconomics</a>	Periode 2	6.0	E_EC_AMAEC
<a href="#">Advanced Methods for Applied Economic Research</a>	Periode 1	6.0	E_EC_AMAER
<a href="#">Advanced Microeconomics</a>	Periode 1	6.0	E_EC_AMIEC
<a href="#">Research Project Economics</a>	Periode 3	6.0	E_EC_RPEC
<a href="#">Thesis MSc Economics</a>	Ac. Jaar (september)	18.0	E_EC_THS

## Master Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 2	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Environmental Economics</a>	Periode 4	6.0	E_STR_EEC
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Human Development</a>	Periode 4	6.0	E_EC_HDEV
<a href="#">Industrial Organization and Competition Policy</a>	Periode 4	6.0	E_EC_IOCP
<a href="#">Labour Economics</a>	Periode 4	6.0	E_EC_LABELEC
<a href="#">Macro and International Finance</a>	Periode 4	6.0	E_FIN_MIF
<a href="#">Macroeconomic Policy in the EU</a>	Periode 2	6.0	E_EC_MPEU
<a href="#">Microeconomics for Development</a>	Periode 2	6.0	E_EC_MED
<a href="#">Time Series Econometrics</a>	Periode 4	6.0	E_EORM_TSE



<a href="#">Urban Economic Challenges and Policies</a>	Periode 4	6.0	E_STR_UECP
--	-----------	-----	------------

## Master Economics - Specialization International and Macroeconomic Policy - Obligatory courses

Within this specialization, 2 courses are obligatory.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Macroeconomic Policy in the EU</a>	Periode 2	6.0	E_EC_MPEU

## Master Economics - Specialization Labour and Health

Human capital is the most valuable assets of individuals. Sufficient human capital allows people to be successful on the labour market and if individuals work they gain additional human capital. Health is a very important determinant of human capital. A well functioning labour market and health care market are therefore essential for any economy. Not surprisingly, these markets are the most important areas of attention of governments. However, the degree of regulation differs between markets and is often heavily debated.

In the specialization Labour and Health, you learn about the trade-offs between efficiency and protection faced by policy makers when making decisions on the welfare state. This implies that you study the pros and cons of government interventions concerning for example benefits systems, health insurance markets, provision of long-term care and how to regulate care providers.

Since there is no one-size-fits-all policy available for the labour market and markets associated to health, this specialization is largely empirical driven and compared different institutional settings.

The programme contains core courses, specialization courses and electives.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [Master Economics - Additional Electives](#)
- [Master Economics - Specialization Labour and Health - Obligatory courses](#)

## Master Economics - Core courses

Four core courses plus a thesis are obligatory within the specializations Developmental Economics, Global Challenges, International and Macroeconomic Policy, and Labour and Health.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Advanced Macroeconomics</a>	Periode 2	6.0	E_EC_AMAEC
<a href="#">Advanced Methods for Applied Economic Research</a>	Periode 1	6.0	E_EC_AMAER
<a href="#">Advanced Microeconomics</a>	Periode 1	6.0	E_EC_AMIEC
<a href="#">Research Project Economics</a>	Periode 3	6.0	E_EC_RPEC
<a href="#">Thesis MSc Economics</a>	Ac. Jaar (september)	18.0	E_EC_THS

## Master Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 2	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Environmental Economics</a>	Periode 4	6.0	E_STR_EEC
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Human Development</a>	Periode 4	6.0	E_EC_HDEV
<a href="#">Industrial Organization and Competition Policy</a>	Periode 4	6.0	E_EC_IOCP
<a href="#">Labour Economics</a>	Periode 4	6.0	E_EC_LABEC
<a href="#">Macro and International Finance</a>	Periode 4	6.0	E_FIN_MIF
<a href="#">Macroeconomic Policy in the EU</a>	Periode 2	6.0	E_EC_MPEU
<a href="#">Microeconomics for Development</a>	Periode 2	6.0	E_EC_MED
<a href="#">Time Series Econometrics</a>	Periode 4	6.0	E_EORM_TSE
<a href="#">Urban Economic Challenges and Policies</a>	Periode 4	6.0	E_STR_UECP

## Master Economics - Specialization Labour and Health - Obligatory courses

Within this specialization, 2 courses are obligatory.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS

Labour Economics	Periode 4	6.0	E_EC_LABEC
------------------	-----------	-----	------------

## Master Economics - Specialization Public Policy

This high-quality one-year programme in economics has a strong interest in the design and evaluation of public policy. Public Policy addresses the main societal challenges of today and tomorrow, including the future of the welfare state, aging of society, global environmental challenges, urbanization of our societies, globalization, and economic development and inequality. The programme addresses questions on market performance and failures, and associated policies, studied from the perspective of incentives and economic behaviour of individual firms and households. It also covers macroeconomic policies directed at aggregate growth and employment, notably fiscal and monetary policies.

It is generally felt that effective public policies to address the great societal challenges are urgently needed, but not ready on the shelf. What can policy makers do to live up to the challenges encountered in our pension systems? What is the role for policy in the developing world, where billions still suffer? How to meet the climate change challenge from an economic perspective? How to make sure that in a rapidly urbanizing world, cities will become or remain places where people can live healthily, safely and happily?

The programme covers both micro- and macroeconomic perspectives on policies at an advanced level. This provides you with a very rich set of perspectives on economic policy analysis. Therefore, this programme offers you the theoretical knowledge and practical skills to tackle complex problems at a high level of abstraction, while emphasizing the need to translate theoretical solutions and empirical evidence into clear-cut policy advice.

Vakken:

Naam	Periode	Credits	Code
Economics of Climate Change	Periode 2	6.0	E_STR_ECC
Economics of the Welfare State	Periode 2	6.0	E_EC_EWS
Globalization, Growth and Development	Periode 4	6.0	E_EC_GGD
Microeconomics and Methods	Periode 1	6.0	E_EC_MM
Policy Seminars and Policy Brief	Periode 3	6.0	E_EC_PSPB
Public Economics and Policy	Periode 1	6.0	E_EC_PEP
Thesis MSc Economics - Public Policy	Ac. Jaar (september)	18.0	E_EC_THSPP
Urban Economic Challenges and Policies	Periode 4	6.0	E_STR_UECP

## Master Economics - No specialization

In case you decide not to specialize within the Master Economics, the following requirements are applicable:

- The four core courses of the specializations other than Public Policy, plus the thesis are obligatory.
- In addition you may choose every other courses, offered by the Master Economics as electives, with a total of 18 EC.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [Master Economics - Additional Electives](#)

## Master Economics - Core courses

Four core courses plus a thesis are obligatory within the specializations Developmental Economics, Global Challenges, International and Macroeconomic Policy, and Labour and Health.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Advanced Macroeconomics</a>	Periode 2	6.0	E_EC_AMAEC
<a href="#">Advanced Methods for Applied Economic Research</a>	Periode 1	6.0	E_EC_AMAER
<a href="#">Advanced Microeconomics</a>	Periode 1	6.0	E_EC_AMIEC
<a href="#">Research Project Economics</a>	Periode 3	6.0	E_EC_RPEC
<a href="#">Thesis MSc Economics</a>	Ac. Jaar (september)	18.0	E_EC_THS

## Master Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 2	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Environmental Economics</a>	Periode 4	6.0	E_STR_EEC
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD
<a href="#">Human Development</a>	Periode 4	6.0	E_EC_HDEV
<a href="#">Industrial Organization and Competition Policy</a>	Periode 4	6.0	E_EC_IOCP
<a href="#">Labour Economics</a>	Periode 4	6.0	E_EC_LABEC

Macro and International Finance	Periode 4	6.0	E_FIN_MIF
Macroeconomic Policy in the EU	Periode 2	6.0	E_EC_MPEU
Microeconomics for Development	Periode 2	6.0	E_EC_MED
Time Series Econometrics	Periode 4	6.0	E_EORM_TSE
Urban Economic Challenges and Policies	Periode 4	6.0	E_STR_UECP

## Advanced Macroeconomics

<b>Vakcode</b>	E_EC_AMAEC (60422010)
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. P.A. Gautier
<b>Examinator</b>	prof. dr. P.A. Gautier
<b>Docent(en)</b>	prof. dr. P.A. Gautier
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	400

### Doel vak

The students will be able to actively read current literature and embark on their own research projects using the knowledge gained about the analytical, mathematical, and statistical tools of modern dynamic macroeconomics. The tools include dynamic optimization, Nash bargaining, and the basic building blocks of DSGE models. We will also discuss the current big issues like: (i) How can small shocks lead to a large crisis (ii) What explains the increase in inequality and is the analysis of Piketty correct?, (iii) What caused the great recession and the euro crisis?

### Inhoud vak

This course provides coverage at an advanced level of the building blocks of macroeconomics. Models of economic growth will be built up from intertemporal optimization decisions of firms and households. Special attention is given to the distribution of income (i.e. the implications of modern growth theory for the theory of Piketty). Next, the course will present the basic tools of Real Business Cycle and New Keynesian models. We also consider modern theories of financial crises and pay a lot of attention to the recent financial and euro crisis. Then, we will consider equilibrium search models which form the core of macro labor. Finally, we discuss budget deficits and Ricardian equivalence plus new political economy models where the behavior of policy makers are part of the model.

### Onderwijsvorm

lecture

**Toetsvorm**

written interim examination  
plus problem sets.

**Literatuur**

Romer, David Advanced Macro Economics. 3rd edition, McGraw Hill.

**Vereiste voorkennis**

Knowledge of calculus and intermediary macro.

**Aanbevolen voorkennis**

Basic knowledge of calculus and undergraduate macro

**Doelgroep**

Msc students

## Advanced Methods for Applied Economic Research

<b>Vakcode</b>	E_EC_AMAER (60422070)
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. S. Dobbelaere
<b>Examinator</b>	dr. S. Dobbelaere
<b>Docent(en)</b>	dr. S. Dobbelaere, S. Sovago
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	400

**Doel vak**

After the course students are able to critically evaluate the quality of empirical research in economic applications. Furthermore, they are capable of performing empirical research themselves, for example, when writing their thesis. The latter implies that they can decide about the appropriate model, can deal with real-life data, are aware of the strength and weaknesses of the model and can estimate and interpret its parameters.

**Inhoud vak**

This course makes students familiar with various microeconomic methods. These methods are often used in economic research, both to test predictions from economic theory and to assess the effectiveness of economic policy. During the course attention is devoted both to the theory underlying the different techniques and the practical application. Theoretical knowledge is examined in the final exam, while the implementation of the different methods is requested in the weekly empirical exercises. In these empirical exercises the software package Stata is used. An important aspect of the course is that students learn how to interpret estimation results.

**Onderwijsvorm**

Lectures  
Practical assignments

### Toetsvorm

The practical homework assignments count for 20% of the final grade, the written exam for the other 80%. However, the assignments only count for the final grade if (i) the grade for the assignments is higher than the exam grade, and (ii) the exam grade exceeds 5.0. If any of these conditions is not met, the final grade equals the exam grade.

### Literatuur

Stock, J.H. and M.W. Watson, Introduction to Econometrics. Pearson Education Inc., 3rd edition update, 2015

### Vereiste voorkennis

Introductory course in econometrics at Bachelor level.

### Aanbevolen voorkennis

Common used statistical tests and simple regression analysis.

### Overige informatie

Students who are not familiar with the software package STATA are encouraged to attend the workshop "Introduction to Stata".

## Advanced Microeconomics

<b>Vakcode</b>	E_EC_AMIEC ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. J.L. Moraga Gonzalez
<b>Examinator</b>	prof. dr. J.L. Moraga Gonzalez
<b>Docent(en)</b>	prof. dr. J.L. Moraga Gonzalez
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	400

### Doel vak

This course prepares the theoretical groundwork for microeconomic policy courses elsewhere in the MSc Economics curriculum, highlighting traditional economic approaches, their normative foundations, and recent theories of information economics. Goal of the course is to make the student comfortable as a user of fundamental concepts of microeconomic theory at an advanced level.

By the end of the course the student will:

- be familiar with the main, unifying microeconomics principles and know how to analyze economic problems using the tools of microeconomics
- know the main concepts of consumer choice and firm behavior, and their relevance for equilibrium and welfare analysis
- be able to identify market failure and evaluate economic policy with regard to efficiency and equity
- be prepared to recognize situations of strategic interaction, as well as the methods to predict economic outcomes in those situations
- be familiar with expected utility theory for decision-making under uncertainty such as insurance
- know the limitations to economic policy
- know of possibilities and limitations to mechanism design in applied

policy fields, such as auctions and matching.

### **Inhoud vak**

This course equips the student with microeconomics tools needed for the subsequent policy courses. Policy applications in themselves are not subject of the current course, but rather their preparation.

The course focuses on modeling and requires substantial math skills (in particular calculus). Traditional topics (part I) include the theory of the firm, consumer choice and demand, partial and general equilibrium analysis and aspects of market failure. Part II covers risk and insurance under symmetric and asymmetric information, concepts of game theory, as well as the economics of information and incentives.

Using problem sets and exercises will increase and deepen the understanding of microeconomics modeling. This will help students touch upon a large number of microeconomic policy issues from a unified perspective.

### **Onderwijsvorm**

lecture  
tutorial

### **Toetsvorm**

Written examination (75%), tutorial (problem sets, 25%) , if exam grade 5.0 or higher.

### **Literatuur**

Snyder and Nicholson, Microeconomic Theory: Basic Principles and Extensions, 11th ed.

### **Vereiste voorkennis**

Familiarity with Microeconomics at the level of Varian, H. R. Intermediate Microeconomics. 8th edition. W. W. Norton, 2010.  
Familiarity with Mathematics at the level of Sydsaeter, Knut and Hammond, Essential Mathematics for Economic Analysis, Prentice Hall, 3rd ed., 2008

### **Aanbevolen voorkennis**

All students (but specially those who think need to refresh their math skills) are strongly encouraged to attend the course "Math Refresher", starting end of August (details t.b.a.).

For more information about Math Refresher, see Canvas.

## **Economics of Climate Change**

<b>Vakcode</b>	E_STR_ECC ()
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. S. Poelhekke
<b>Examinator</b>	dr. S. Poelhekke
<b>Docent(en)</b>	prof. dr. R.S.J. Tol, dr. S. Poelhekke
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400



## **Doel vak**

This course focuses on climate change: one of the greatest challenges of our time. What can the science of economics teach us about its causes and potential solutions? What are the costs and benefits of climate change? Should we tax carbon, cap-and-trade emission rights, or subsidize solar and wind power? Why is it so difficult to sign environmental agreements such as 'Kyoto' and 'Paris' despite the high stakes? Does trade harm the environment? Will our industry move abroad if we take a leading role and 'go it alone'?

After having completed this course, you will know the answers to the above questions and be able to enter into the economic policy debate well informed.

Moreover, you will:

- have a deep understanding of the fundamental difficulties and complexities of environmental policy making in an international context;
- have gained insights in the economics of international agreements and international trade;
- are able to apply to theory to cases such as climate change, acidification and ozone depletion;
- have sharpened your economic analysis in the group discussions and improved your presentations skills.

## **Inhoud vak**

The course consists of lecturers teaching the state-of-the-art, and students giving presentations on seminal papers in the literature.

The lectures cover the following topics (provisional scheme)

- Introduction: Externalities and environmental policy
- Economic impacts of climate change
- Climate change policy making: instruments and costs
- The economics of acidification and ozone depletion
- Trade the environment: pollution havens versus factor endowments
- International environmental agreements

The first eight lectures are on the economics of climate change and climate policy, and also on the problems of acidification and ozone depletion. The following subjects are analysed. What is climate change, and what are its causes and consequences? What are the economic impacts of climate change? What are the costs of emission reduction? How can emission reductions be achieved? What lessons do acidification and ozone policy hold for climate policy? What is optimal and equitable climate policy? How likely is this in reality? Are there effective and acceptable alternatives to optimal climate policy?

The last six classes are on the relationship between trade and the environment. Common wisdom is that trade is the source of many environmental problems. One of the main reasons for this is that governments are afraid that domestic environmental policies will reduce the home economy's international competitiveness and hence environmental policies are set too lax. In the first four lectures we analyze to what extent this fear is correct, both theoretically and empirically. We compare how the trade-off between international competitiveness and the environment depends on the type of pollutant (local pollutants such as PM10, or transboundary pollutants, such as

SO<sub>2</sub>) as well as on the size of the domestic economy. In lectures 5 and 6 we turn to the issue of international agreements. Writing down a protocol which requires countries to reduce their emissions of CO<sub>2</sub> or SO<sub>2</sub> is easy (see for example the Kyoto Protocol), but what are the incentives for countries to actually join the coalition? And what is the role of trade sanctions therein?

**Toetsvorm**

- essay
- presentations
- take home exam

**Literatuur**

Books:

- Perman et al., Natural Resource and Environmental Economics, Addison Wesley, 4th edition, 2011.
- Richard Tol, Climate Economics: Economic Analysis of Climate, Climate Change and Climate Policy, Edward Elgar Publishing, 29 aug. 2014
- 208 pagina's
- Copeland and Taylor, Trade and the Environment, Princeton University Press, 2003

Articles (tbd):

- Nordhaus, William D & Yang, Zili, 1996. "A Regional Dynamic General-Equilibrium Model of Alternative Climate-Change Strategies," American Economic Review, vol. 86(4), pages 741-65.
- Hoel, Michael & Shapiro, Perry, 2003. "Population mobility and transboundary environmental problems," Journal of Public Economics, Elsevier, vol. 87(5-6), pages 1013-1024, May.
- Scott Barrett, Self-Enforcing International Environmental Agreements, Oxford Economic Papers , New Series, Vol. 46, Special Issue on Environmental Economics (Oct., 1994), pp. 878-894.
- Santiago J. Rubio & Alistair Ulph, 2006. "Self-enforcing international environmental agreements revisited," Oxford Economic Papers, Oxford University Press, vol. 58(2), pages 233-263, April.
- de Zeeuw, Aart, 2008. "Dynamic effects on the stability of international environmental agreements," Journal of Environmental Economics and Management, Elsevier, vol. 55(2), pages 163-174, March.
- Levinson, Arik. 2009. "Technology, International Trade, and Pollution from US Manufacturing." American Economic Review, 99(5): 2177-92.
- Wolfgang Keller and Arik Levinson, "Pollution Abatement Costs and Foreign Direct Investment Inflows to U.S. States", The Review of Economics and Statistics, 2002, vol. 84, issue 4, pages 691-703.
- Steven Poelhekke and Frederick van der Ploeg, "Green havens and pollution havens", The World Economy, forthcoming.

**Vereiste voorkennis**

Microeconomics.

**Economics of the Welfare State**

<b>Vakcode</b>	E_EC_EWS ()
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels

<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. P.W.C. Koning
<b>Examinator</b>	prof. dr. P.W.C. Koning
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### **Doel vak**

By the end of this course, students will be able to assess the concepts of the welfare state from an economic perspective:

- Students are able to identify the key equity and efficiency arguments for the provision of various welfare state programs.
- Students understand the concepts of insurance theory and their implications for the provision of social insurance.
- Students can critically evaluate empirical applications about individual behavior in the context of the welfare state.
- Students are able to apply their knowledge on real life welfare state programs, of which they can evaluate, judge and communicate their pros and cons.

### **Inhoud vak**

Governments implement welfare state programs to protect their citizens to social risks such as falling sick, becoming unemployed, ageing or the occurrence of health costs. These programs, that range from public benefits to the regulation of private insurance markets, may have a strong impact on the income, well-being and the behavior of individuals. Welfare state programs are typically justified by equity and public responsibility, but at the same time the growth of public expenditures force governments to make more efficient use of existing resources. This gives rise to a tension between equity and efficiency considerations.

This course provides an economic perspective on the design of equitable and efficient welfare state programs. The course starts with exploring the fundamental arguments for state intervention and the provision of social insurance, using concepts from insurance theory. Next, attention will be devoted to different welfare state interventions, including cash benefits (such as unemployment insurance, sick pay, disability insurance and pensions) and benefits in kind programs (e.g. health care). Throughout the course, these programs will be assessed along the line of equity and efficiency measures, using insights from the empirical literature on the effect of welfare state interventions on individual behavior and social outcomes.

### **Onderwijsvorm**

Lectures, student presentations, as well as a paper assignment

### **Toetsvorm**

Written interim examination and grade for presentations/papers

### **Literatuur**

Barr, The Economics of the Welfare State, Oxford University Press, Edition 4 (or higher)

In addition, articles are mandatory as well. These are included in the Course Manual.

## **Environmental Economics**

<b>Vakcode</b>	E_STR_EEC (60442040)
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. C. Fischer
<b>Examinator</b>	prof. dr. C. Fischer
<b>Docent(en)</b>	dr. G.C. van der Meijden
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### Doel vak

The course aims to teach students why natural resource management should not be left to the free market. After following this course, students are able to characterize several types of market failure and to explain how each of these causes environmental problems, such as overexploitation of natural resources and air pollution. Moreover, students will be able to explain which policy instruments can be used by the government to tackle environmental problems that arise in a market economy. Students will also learn how to use stated and revealed preference methods to value the environment. Finally, students will be taught how renewable resources (such as forestry and fisheries), and non-renewable resources (such as fossil fuels) should optimally be exploited from a social welfare perspective and how the optimal exploitation differs from the exploitation in a market equilibrium. There is also a lecture on the economic impact of natural resources, and whether these are a curse or a blessing.

The course consists of lectures, homework assignments, tutorials, and presentation/discussion sessions. The lectures are aimed at developing a thorough understanding of key economic, environmental and ethical aspects of environmental problems, and of the link between theory, methods and empirical analysis. The goal of the homework assignments that will be discussed during the tutorials is to practice the use of modern economic methods to analyse and solve problems in the field of environmental economics. The presentation/discussion sessions are intended to improve the participants' economic reasoning and communication skills. In these sessions, students will present a journal article in class, and they are expected to participate in a group discussion afterwards.

After following this course, you:

- can explain why, and under which conditions, the free market does not result in an efficient outcome.
- are capable of showing how externalities can be 'internalized' by using market instruments, like Pigouvian taxes, quotas and tradable permits, etc.
- are able to advise environmental policy makers on which policy instruments to use under different circumstances in order to correct the market outcome
- use stated and revealed preference methods to attach a monetary value to environmental services
- can explain how non-renewable resources like fossil fuels, are exploited in a market economy and how the exploitation differs from the optimum

- can show how renewable resources, like fishery and forestry, are exploited in a market economy and how the exploitation differs from the social optimum
- are able to describe and explain the optimal climate policy in the global economy and to explain how sub-optimal climate policies can lead to a 'Green Paradox', in the sense that the problem of climate change is aggravated instead of diminished upon the introduction of those policies
- are able to describe the most important interactions between the economy and the environment, and their relationship with sustainable development.
- are able to explain why resource rich countries often suffer from low rates of economic growth, and what they can do to avoid this so-called Resource Curse.
- are able to work with simple mathematical models to analyse the effects of environmental policy and to determine the time profile of renewable and non-renewable resources, both in the optimum and in the market equilibrium
- have improved your presentation and discussion skills

### Inhoud vak

The following topics will be dealt with in the course:

- interaction between the economy and the environment
- environmental policy: Pigouvian taxes, quotas, and tradable emission permits
- non-renewable resource use: scarcity and market structure
- renewable resource use: fishery and forestry
- non-renewable resource use and climate change
- climate policy and the 'Green Paradox'
- sustainable development
- welfare economics and market failures
- resource-rich economies and the 'Resource Curse'
- theory and methods for environmental valuation

The topics for the group discussions and student presentations can be chosen by the participants. They should be based on articles published in scientific journals.

### Onderwijsvorm

Lectures, assignments, student presentations, and group discussions.

### Toetsvorm

Written exam (60%), assignments (30%), and presentation/participation (10%). Passing the course is conditional on the exam grade being 5.0 or higher.

### Literatuur

To be announced.

### Aanbevolen voorkennis

Advanced microeconomics.

## Globalization, Growth and Development

<b>Vakcode</b>	E_EC_GGD (60442050)
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics

<b>Coördinator</b>	prof. dr. C.T.M. Elbers
<b>Examinator</b>	prof. dr. C.T.M. Elbers
<b>Docent(en)</b>	prof. dr. C.T.M. Elbers
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### Doel vak

Aim of the course is to study aspects of globalization, growth and development that are fruitfully studied from the perspective of the economics discipline. After following the course the student will

- know the basic facts concerning the topics discussed in the course
- have a thorough understanding of these topics, in particular their economic dimension
- have learnt various empirical research techniques that can be applied within this field of economics
- be able to present and discuss current journal articles and book chapters on globalization

### Inhoud vak

Globalization poses both challenges and offers opportunities to rich, emerging and poor countries. The course focuses on a number of themes that have been central in the academic and public discussion of recent trends in the world economy. Among them are:

- Relationship between growth, trade and poverty
- Globalization and inequality
- International migration
- International trade and capital flows
- Environmental and labour standards
- Institutions
- Trade shocks, resources and civil conflict
- Financial stability

More topics in globalization are introduced in the course in the form of student presentations. The course stresses the importance of empirical research and devotes significant time to the empirical strategies that have been used by researchers in studying globalization.

### Onderwijsvorm

Lectures, Student Presentations and Discussions

### Toetsvorm

Written exam at the end of the course

### Literatuur

Selected articles

### Vereiste voorkennis

Advanced Macroeconomics 4.2 and International Economics 3.2

### Doelgroep

Students specialising in economics

## Human Development

<b>Vakcode</b>	E_EC_HDEV (60442130)
<b>Periode</b>	Periode 4

<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. M.P. Pradhan
<b>Examinator</b>	prof. dr. M.P. Pradhan
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### **Doel vak**

An active study of the advanced literature of the human development aspects of development economics, the branch of economics that focusses on the specific economic problems of less developed nations. A thorough exercise in independently formulating and studying relevant research issues and analysing in a constructive and critical manner the problems of development economics in the human development context.

### **Inhoud vak**

In the lectures, we study human development in developing countries using recent articles on this topic. We start off with two lectures on education, looking at how education systems are financed and organised, outcomes are measured, and where the challenges for future development lie. This also provides an entry point for discussing impact evaluation methods in more depth, and how they have been applied in the context of designing education policies for developing countries. We discuss both supply and demand side policies. We then move on to the study of social capital, and use as an entry point the participatory development type projects, which heavily rely on local social capital for implementation. The next week is on early childhood development, which has in recent years received more attention. We investigate the hypothesis that intervening before children enter primary education is maybe the most cost effective way to improve human development outcomes. This discussion provides an entry point to discuss modelling issues that arise when analysing human development during formative years. The last two lectures focus on health. We study inequality in health and access to health services, health systems and financing, and impact of innovative delivery models. PS. I may replace the lecture on social capital with a lecture on the role of the private sector this year.

The tutorials are used for student led discussions, where groups of students prepare a presentation and discussion on a particular research question related to the topic discussed during the lectures. Active participation in the tutorials is mandatory.

### **Onderwijsvorm**

Lectures

### **Toetsvorm**

Written examination, presentation and participation in classroom discussion, term paper.

### **Literatuur**

Articles provided during the course.

### **Aanbevolen voorkennis**

Proven knowledge of basic micro economics and basic applied econometrics

## Overige informatie

Course taught at the UvA.

# Industrial Organization and Competition Policy

<b>Vakcode</b>	E_EC_IOCP ()
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. E.I. Motchenkova
<b>Examinator</b>	dr. E.I. Motchenkova
<b>Docent(en)</b>	dr. E.I. Motchenkova
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

## Doel vak

This course is designed to give students an overview of the mainstream theory of Industrial Organization.

After following this course, students

- can define and recognize main types and determinants of market structure
- can name and explain the determinants of the actions taken by firms and are able to explain the relationships between firms' actions and market outcomes
- are able to apply mathematics, game theory, welfare analysis and micro-economic tools to analyze the problem of collusion, entry and exit decisions, vertical control, product differentiation, and adoption of new technologies issues
- can describe and analyze (both analytically and graphically) the main models used for analysis of strategic behavior of firms under asymmetric information
- are able to determine optimal firm and regulator behavior conditional on the type of market structure and nature of competition in the market and draw policy conclusions

## Inhoud vak

Many markets of interest are dominated by only few firms. These firms not only choose their prices and outputs, but also the quality and design of their products, engage in advertising campaigns and make investments in R&D. They also decide on whether to enter or exit markets, whether to merge, vertically integrate, or to collude with rival firms. These choices have strong effects on the markets, in which firms operate, and may also have wider repercussions throughout the economy. This course presents an approach - based on strategic decision making - for understanding the functioning of such markets. We also use this approach to clarify the role of the government in regulating economic activity.

This course is designed to give students an overview of the mainstream theory of Industrial Organization, to provide students with insights in the organization of markets, and to give an overview of the main analytical tools used for analysis of imperfectly competitive markets.



The course is primarily theoretical. At the same time, a number of empirical and experimental results will be discussed.

Part 1 of the course concerns non-strategic industrial organization and consists of the theory of the firm, analysis of monopoly power, price discrimination and vertical integration. Part 2 studies strategic industrial organization. The topics are static oligopoly models, dynamic price competition, spatial competition and advertising, incumbent/entrant behavior, R&D and adoption of new technologies. Also substantial attention will be devoted to applications of the IO tools for analysis of Competition policy. There we will focus on European and US competition law, collusion, abuse of dominant position, and mergers.

### Onderwijsvorm

Lectures  
Workshops and assignments

### Toetsvorm

written interim examination - 80% of the final grade  
problem sets and workshop presentations – 20% of the final grade

### Literatuur

Tirole, J. (1988), The Theory of Industrial Organization. MIT Press.  
Motta, M. (2004), Competition Policy: Theory and Practice, Cambridge University Press.  
Reader with articles provided on Black Board

### Vereiste voorkennis

Microeconomics course

### Aanbevolen voorkennis

Bachelor level courses in Industrial Organization

## Labour Economics

<b>Vakcode</b>	E_EC_LABELC (60422030)
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. S. Dobbelaere
<b>Examinator</b>	dr. S. Dobbelaere
<b>Docent(en)</b>	dr. S. Dobbelaere
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### Doel vak

This course is an introduction to labor economics with an emphasis on applied microeconomic theory and empirical analysis. The aim of the course is to acquaint students with traditional and contemporary topics in labor economics. The following course objectives are defined:

- Demonstrating a theoretical understanding of how labor markets operate (disciplinary knowledge).
- Understanding the recent developments of wage determination in imperfectly competitive labor markets (disciplinary knowledge &

analytical and quantitative skills).

- Understanding how institutional forces and technological change shape labor market performance (disciplinary knowledge & analytical and quantitative skills).
- Being able to discuss critically existing empirical evidence (critical readership).
- Learning how to distinguish alternative theories empirically and how key parameters are obtained from data (disciplinary knowledge & analytical and quantitative skills).
- Performing own empirical analysis by means of a replication exercise (analytical and quantitative skills).
- Understanding the crucial role of better data and a better match between theory and empirics in finding pertinent answers to societal and economic problems in contemporary labor markets (societal and contextual relevance).

### Inhoud vak

The course covers a systematic development of theories of wage determination over the past decades. We focus on the two traditions of modelling wage determination in imperfectly competitive labor markets: ex post wage bargaining and ex ante wage posting. We study employment in a dynamic context, emphasizing the role of search frictions. We focus on the evolution of wage inequality and changes in the employment structure, taking into account the role of technological change, international competition and labor market institutions. These topics are politically and economically important and underscore a lot of modern labor economics.

### Onderwijsvorm

Lectures and tutorials (in-class presentations of assignments).

### Toetsvorm

Interim assessment: Case/paper individual, Case/paper group and Presentation. End of period: Open exam. Conditional on the exam grade exceeding 5.0, assignments count for 40% of the final grade and the exam for 60%. If the exam grade is lower than 5.0, the final grade is equal to the exam grade.

### Literatuur

Selected main readings (papers) and chapters of the textbook "Cahuc P., Carcillo S. and A. Zylberberg. 2014. Labor Economics (2nd edition). MIT press".

## Macro and International Finance

<b>Vakcode</b>	E_FIN_MIF ()
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. A.J. Menkveld
<b>Examinator</b>	prof. dr. A.J. Menkveld
<b>Docent(en)</b>	prof. dr. A.J. Menkveld
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

## Doel vak

The goals of this course are:

- to gain a thorough understanding of the role of financial markets in the macro-economy and international capital flows.
- to develop a critical attitude towards competing theories in macro-finance.
- develop skills to answer macro-finance questions using advanced statistical analyses.

## Inhoud vak

Macro-finance addresses the link between asset prices and economic fluctuations. Potential topics that will be discussed in this course include:

- consumption based asset pricing models
- exchange rate models
- finance and growth
- foreign direct investments and portfolio investments
- monetary policy

## Onderwijsvorm

In each of the six weeks of this period:

- 2 \* 2 hours lecturing
- 1 \* 2 hours tutorial

## Toetsvorm

The final grade consists of a written exam (min. 5.0) and assignments.

## Literatuur

Selection of academic articles.

## Aanbevolen voorkennis

Students are strongly advised to have bachelor level knowledge of Investments (Bodie, Kane, and Markus: Investments, McGraw-Hill), Macro-economics, and Statistics.

## Doelgroep

Students in Master Finance, Master Economics, Master Business Administration - Financial Management.

## Macroeconomic Policy in the EU

<b>Vakcode</b>	E_EC_MPEU ()
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. B.A. Brugemann
<b>Examinator</b>	dr. B.A. Brugemann
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### **Doel vak**

1. Students know key institutional aspects of monetary, fiscal, and financial policy in the EU.
2. Students know the main theories and empirical evidence concerning monetary, fiscal, and financial policy.
3. Students are able to integrate theoretical and empirical insights as well as institutional knowledge when assessing macroeconomic policies.
4. Students are able to independently identify any gaps in the knowledge they need to comprehensively assess a macroeconomic policy issue.
5. Students are able to implement a plan for comprehensively assessing a macroeconomic policy issue, working independently and in a team, and present their findings to policy makers.

### **Inhoud vak**

The Eurozone Crisis is not over. Recovery is slow and average unemployment in the Euro area is still above 10%. Despite ongoing reforms, the financial sector remains fragile. Moreover, many countries face high deficits and large debt-to-GDP ratios. The crisis has exposed weaknesses in the construction of the Economic and Monetary Union of the European Union (EMU). It has also led to unprecedented policy responses. In addition, the EU is facing the consequences of Brexit referendum.

In this course you will study Macroeconomic Policy in the EU. You will work on identifying the key macroeconomic policy issues facing the EU and the Eurozone, and on determining which issue is currently the most important. You will identify the best available academic research on this most important issue, including empirical and theoretical research in economics, and potentially relevant research in fields outside of but related to economics. Taking into account this research as well as other relevant considerations, you will formulate concrete policy recommendations for addressing this issue.

As is clear from the preceding paragraph, the content of this course is largely endogenous. It depends on what you, as a group, decide is the macroeconomic policy issue that is currently most important for the EU and the Eurozone. It also depends on what you, as a group, identify as the best available academic research on this issue. The teachers of the course will provide you with guidance in making these decisions. As experts in macroeconomics, they will also be a resource that helps you with understanding challenging research papers in economics.

### **Onderwijsvorm**

As discussed in the content section, the content of this course is not pre-determined by the teachers. Rather, it is determined by what you decide as a group. In the beginning of the course, the teachers will primarily moderate and guide the process of identifying the most important policy issue currently facing the EU and the Eurozone, and in finding the best available academic research on this issue. Thus there will be no traditional lecturing at the beginning of the course. In your class meetings, you will decide that certain tasks need to be carried out before the next class meeting. For example, it may be necessary to prepare short presentations of the arguments supporting the case that particular policy issues are the most important. You will decide on these tasks together with the teachers. These tasks then become homework assignments that may be graded. They can be individual or group assignments.

After the class meetings of the first two weeks, you will have identified a first set of high-quality research papers that are relevant for the most important policy issue you have identified. You will then do a first reading of these papers. Given your current level of training in economics, there are likely to be important aspects of the analysis that you would like to understand better before using the paper as a basis for policy advice. You will identify these aspects of the analysis, formulating specific questions describing what you would like to understand better. At this stage, you can request that the teachers give lectures on this research that address your questions.

In the process of identifying high-quality academic research, the teachers will guide you to also include relevant empirical research papers. They will then design one (or potentially two, depending on the level of complexity of the papers) empirical assignments that ask you to replicate parts of the empirical analysis. This is intended to promote your understanding of the empirical research and give you an opportunity to apply elements of what you have learned in the course on advanced methods.

Throughout, we will adopt the perspective of a think tank that is focused on macroeconomic policy in Europe. In the first week (and possibly the beginning of the second week), we adopt the perspective of the board of directors of this think tank. Here the objective will be to set priorities for the work of the think tank, identifying the most important policy issue that the think tank should focus its resources on. We will then switch gears, adopting the perspective of policy consultants working for this think tank. As policy consultants, we need to identify high-quality academic research and obtain a sufficient level of understanding of this research to confidently provide policy recommendations. Your final task (in the last two weeks) will be to write a policy brief that is providing a concrete policy recommendation, supported by the academic research we have considered, and taking into account other considerations you find important. The policy brief will be a group assignment, and accounts for a substantial part of the final grade.

### **Toetsvorm**

Open Exam, Case/paper Group (Policy Brief)

### **Literatuur**

There is no textbook. The readings consist primarily of academic research articles and policy papers.

### **Vereiste voorkennis**

Bachelor economics or another bachelor plus premaster.

### **Aanbevolen voorkennis**

Good knowledge of macro- and microeconomics as well as methods of empirical analysis.

## **Microeconomics and Methods**

<b>Vakcode</b>	E_EC_MM ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics

<b>Coördinator</b>	dr. E.I. Motchenkova
<b>Examinator</b>	dr. E.I. Motchenkova
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	400

### Doel vak

This course offers the main theoretical concepts in consumer choice, firm behavior and analysis of imperfectly competitive markets. It also makes students familiar with various microeconomic methods. These methods are often used in economic research, both to test predictions from economic theory and to assess the effectiveness of economic policy.

Specific learning outcomes upon completion of this curricular item are

- being able to understand the relevance of economics for modern societies
- acquiring knowledge in the decisions to be taken by individual consumers and producers to maximize utility and profit
- gaining insight into the determination of the equilibrium outcomes in different market structures
- analyzing firm behavior in monopolistic and oligopolistic markets
- being able to evaluate public economic policy including competition law aimed at correcting market failures in imperfectly competitive markets
- understanding the impact of various forms of asymmetric information on economic transactions
- learning about the tools that governments might use for addressing market failures
- being familiar with the basic econometric techniques
- being able to critically evaluate empirical research in economic applications
- being able to make decisions about the appropriate statistical model
- being capable of performing empirical research using the software package STATA

### Inhoud vak

This course focuses on fundamental microeconomic theory and methods for applied economic research.

The course discusses the main theoretical concepts and policy applications in microeconomics. Applying economic tools of analysis helps students to gain an understanding of how decisions are being made at the micro level by firms, consumers and government. Microeconomics also helps evaluating observed outcomes and the consequences of policy choices. In particular, we cover consumer and producer behavior, game theory, market structures (perfect competition, monopoly, oligopoly) and market imperfections. The role of policy will be discussed throughout.

Correct validation of economic theory can only be achieved with empirical research and public policies need to be evaluated in order to understand their effectiveness. Therefore, this course also provides an overview of econometric research methods in economics and students learn how to apply these methods to real-world data. Attention is devoted both to the theory underlying the different techniques and the practical application. An important aspect of the course is that students learn how to interpret estimation results.

**Onderwijsvorm**

Lectures and seminars

**Toetsvorm**

Written final exam (80%) and written group assignments (20%)

**Literatuur**

Onderstal, A.M., 2014. Economics of organizations and markets. Pearson Benelux (ISBN 9789043030410)  
 Stock, JH. and MW. Watson. 2015. Introduction to Econometrics. Updated 3rd global edition. Pearson Education (ISBN 10: 1-292-07131-1)

**Vereiste voorkennis**

Students are strongly advised to follow Math Refresher and Introductory STATA course in the last week of August.

**Microeconomics for Development**

<b>Vakcode</b>	E_EC_MED (60422090)
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. M.P. Pradhan
<b>Examinator</b>	prof. dr. M.P. Pradhan
<b>Docent(en)</b>	prof. dr. C.T.M. Elbers, prof. dr. R.H. Oostendorp, prof. dr. M.P. Pradhan, prof. dr. P.F. Lanjouw
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

**Doel vak**

In this course we apply microeconomics to topics in development economics. The aim is not to be complete, but to select a number of well-studied topics, stressing their empirical foundation as well as the role of policy. Students should be able to:

- demonstrate knowledge and understanding of microeconomic principles underlying economic development
- have a good understanding of empirical strategies to identify microeconomic foundations of development
- demonstrate an ability to derive policy implications from microeconomic development analysis

**Inhoud vak**

The concepts and measurement of poverty and inequality will be extensively discussed as well as methods for evaluating the impact of policy. The impact of market imperfections, particularly for handling risk, on firm and household behaviour will be covered, including a discussion of consumption smoothing, risk-sharing, diversification and microfinance strategies. The principal-agent relationship between donors and recipients of foreign aid will be illustrated with a discussion of elite capture and the measurement and costs of corruption. During the course, extensive use will be made of

empirical evidence.

### Onderwijsvorm

lecture

### Toetsvorm

written examination, assignments

### Literatuur

Selected articles to be announced.

### Aanbevolen voorkennis

- Advanced Microeconomics (code E\_EC\_AMIEC)
- Advanced Methods for Applied Economic Research (code E\_EC\_AMAER)

## Policy Seminars and Policy Brief

<b>Vakcode</b>	E_EC_PSPB ()
<b>Periode</b>	Periode 3
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. M.W. Hofkes
<b>Examinator</b>	prof. dr. M.W. Hofkes
<b>Lesmethode(n)</b>	Werkcollege
<b>Niveau</b>	400

### Doel vak

The goal of this course is that students learn about making policy in practice. The course focuses on what the role of economists is in designing public policy and how in practice the decision process works. Students learn to apply economic reasoning to societal problems and to develop ideas about policy improvement. Thereby, students develop practical skills that characterize a good public policy economist. Furthermore, the learn to identify the relevant contributions in the academic literature and to translate these to useful policy analysis. Finally, Students learn to work independently, and to present their findings to both expert and non-expert academic audiences.

### Inhoud vak

Students organize a short seminar series with policy makers. During these seminars the policy makers talk about the role of the economist in the design of public policy and how policy decisions are made. Furthermore, students choose a urgent societal problem which they analyse in a policy brief. This policy brief uses the relevant literature to provide an economics analysis of the societal problem and contains a clear suggestion for designing or improving public policy. Finally, students present their policy brief in a conference type meeting.

### Onderwijsvorm

Seminars and presentations

### Toetsvorm



Role in organizing seminars, written policy brief and presentation

### Doelgroep

Public Policy students

## Public Economics and Policy

<b>Vakcode</b>	E_EC_PEP ()
<b>Periode</b>	Periode 1
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. E.T. Verhoef
<b>Examinator</b>	prof. dr. E.T. Verhoef
<b>Docent(en)</b>	prof. dr. H.L.F. de Groot
<b>Lesmethode(n)</b>	Hoorcollege, Werkgroep
<b>Niveau</b>	400

### Doel vak

The aim of the course is to prepare the conceptual groundwork for policy analyses and expositions later in the Public Policy program. Students will learn the central concepts and theories from the field of Public Economics and will learn how to apply these in policy analysis and advice. The course will seek to strike an optimal balance between on the one hand mastering the analytical and technical skills required to be able to understand and apply micro and welfare economic theory for policy analysis and advice, and, on the other, the ability to apply these skills in analyzing and assessing concrete contemporary policy issues. This aim is strived for by the course's set-up, in which lectures will be used for in-depth discussion and explanation of theory, and tutorials are designed to learn to apply this to concrete policies.

### Inhoud vak

The course will address topics such as taxation of households and firms, tax incidence, public debt, distributional effects of taxation and public expenditure, theories of the state, efficiency and welfare, optimal taxation and Ramsey pricing, market failure, externalities, and non-local and local public goods, and local public goods. The twelve lectures will follow closely the material covered in the textbook, and will seek to not only make the technical treatment and theoretical concepts accessible, but also to draw the links with contemporary policy challenges.

### Onderwijsvorm

The course consists of twelve lectures and six tutorial sessions, and ends with a written exam. The exact schedule will be announced shortly via Canvas.

### Toetsvorm

The grading will be based on

- Tutorial scores (25%)
- Written exam (75%)

### Literatuur

Atkinson, A.B. and J.E. Stiglitz (2015). Lectures in Public Economics, 2nd edition. Princeton University Press, Princeton and Oxford.

### Vereiste voorkennis

Material covered in the first three weeks of Period 1, in the course Microeconomics and Methods.

### Aanbevolen voorkennis

Intermediate microeconomics, for example at the level of Varian's text on Intermediate Economics (Hal R. Varian: Intermediate Microeconomics: A modern Approach. 6th edition or later. New York: W.W. Norton), and, where less formal training has been acquired, a working knowledge of calculus.

### Doelgroep

Students in the Public Policy program.

## Research Project Economics

<b>Vakcode</b>	E_EC_RPEC (60432020)
<b>Periode</b>	Periode 3
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. S. Hochguertel
<b>Examinator</b>	dr. S. Hochguertel
<b>Lesmethode(n)</b>	Werkgroep
<b>Niveau</b>	400

### Doel vak

During this period, the student writes and presents an academic paper based on a literature review, under supervision from a School member.

The goal is to strengthen some essential practical skills that characterize a good economist, namely the ability to master a certain field of literature and to identify the relative contributions of different articles to this field, as well as to identify remaining blind spots, and the ability to present this knowledge in a structured way, both as a written report and in the form of an oral presentation.

Specific learning outcomes upon completion of this curricular item:

- Students are able to identify relevant economic issues, to formulate appropriate research questions, and to proceed to a plan for implementation to answer their question
- Students have developed a feel for what makes a good and useful model and in what context to use it. They have acquired a critical attitude towards scientific literature.
- Students have developed a critical attitude to relevance and shortcomings of empirical data compared to theoretical requirements, and have become aware of limitations in insights that can be gained from theoretical reasoning alone when addressing real- life issues
- Students are able to work independently, and are able to present their findings to both expert and non-expert academic audiences

**Inhoud vak**

During this research project, students are asked to review a coherent set of around 10 scientific papers, of which around four core contributions. Core contributions are preferably (recently) published in leading economics journals and of high technical or substantive content.

The process requires to reflect on those contributions, to put them into perspective, and to write a critical evaluation. The review presents the essence of the papers studied, discusses the relatively strong and weak aspects of the different papers, and where relevant compares and confronts the different insights from different approaches, identifying issues for possible further analysis. The project closes with a presentation to fellow students and School.

Domain: any area of economics, preferably where sufficient School expertise for supervision is available.

**Onderwijsvorm**

Individual supervision by School member.

**Toetsvorm**

Paper and presentation in public (single grade); subcriteria apply.

**Literatuur**

n.a.

**Vereiste voorkennis**

None.

**Aanbevolen voorkennis**

Advanced Microeconomics; Advanced Methods for Applied Economic Research; Advanced Macroeconomics

**Doelgroep**

Program participants MSc Economics

**Thesis MSc Economics**

<b>Vakcode</b>	E_EC_THS ()
<b>Periode</b>	Ac. Jaar (september)
<b>Credits</b>	18.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. S. Hochguertel
<b>Examinator</b>	dr. S. Hochguertel
<b>Niveau</b>	500

**Doel vak**

The final thesis of the MSc program in Economics is a capstone product in which the student demonstrates her or his abilities (i) to conduct independent academic research on a specific question that is of substantive interest to the field of economics, and (ii) to provide a sufficiently deep and thoroughly documented, yet focused answer to that research question.

Note that over and above having to demonstrate proficiency in independent, scientific writing, the thesis should ideally also bear witness to applying advanced (theoretical or empirical) tools of economic analysis.

The thesis emphasizes the creation of an original contribution that goes clearly beyond what can be found elsewhere in the literature. Therefore, the thesis may be seen as the final product of going through the educational program, and it embodies the proof that the student actually is a master in the academic discipline of economics.

Whereas the final product of the thesis is what will count eventually, important learning elements are involved when going through the process of writing a thesis.

### **Inhoud vak**

The student develops and writes the thesis under close supervision of a School member. The thesis can be the result of an internship, but is judged solely on its academic quality. The thesis is submitted in the form of an academic paper. The following aspects shall receive due consideration:

**Tools:** The student must be able to select and apply the appropriate research method for answering the research question. The research activities should adhere to high academic and ethical standards. Tools of analysis include applied statistical and econometric methods for work using economic data, and/or tools of theoretical economic modeling.

**Interpretation:** the student should be able to put findings into a theoretical, practical and ethical perspective. He or she should also be able to frankly reveal the limitations of own work and formulate critically constructive questions about the work of others.

**Independence:** the student must be able to work independently under supervision, and possess the intellectual capabilities required for self-directed learning to broach new if related areas of scientific inquiry.

**Presentation:** the student must be proficient in academic writing and expository presentation of results.

**Domain:** any area of economics, preferably where sufficient School expertise for supervision is available.

### **Onderwijsvorm**

Individual supervision by School member.

### **Toetsvorm**

Paper and presentation in public (single grade); subcriteria apply.

### **Literatuur**

n.a.

### **Vereiste voorkennis**

None.

### **Aanbevolen voorkennis**

Advanced Microeconomics; Advanced Methods for Applied Economic Research; Advanced Macroeconomics; Research Project in Economics

**Doelgroep**

Program participants MSc Economics

**Overige informatie**

Students opting for a specialization need to choose a suitable thesis topic commensurate with that specialization.

**Thesis MSc Economics - Public Policy**

<b>Vakcode</b>	E_EC_THSPP ()
<b>Periode</b>	Ac. Jaar (september)
<b>Credits</b>	18.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	dr. S. Hochguertel
<b>Examinator</b>	dr. S. Hochguertel
<b>Niveau</b>	400

**Doel vak**

The final thesis of the MSc program in Economics Public Policy track is a capstone product in which the student demonstrates her or his abilities (i) to conduct independent academic research on a specific question that is of substantive interest to the field of economics (in particular in the public policy domain), and (ii) to provide a sufficiently deep and thoroughly documented, yet focused answer to that research question.

Note that over and above having to demonstrate proficiency in independent, scientific writing, the thesis should ideally also bear witness to applying advanced (theoretical or empirical) tools of economic analysis.

The thesis emphasizes the creation of an original contribution that goes clearly beyond what can be found elsewhere in the literature. Therefore, the thesis may be seen as the final product of going through the educational program, and it embodies the proof that the student actually is a master in the academic discipline of economics. Whereas the final product of the thesis is what will count eventually, important learning elements are involved when going through the process of writing a thesis.

**Inhoud vak**

The student develops and writes the thesis under close supervision of a School member. The thesis can be the result of an internship, but is judged solely on its academic quality. The thesis is submitted in the form of an academic paper. The following aspects shall receive due consideration:

**Tools:** The student must be able to select and apply the appropriate research method for answering the research question. The research activities should adhere to high academic and ethical standards. Tools of analysis include applied statistical and econometric methods for work using economic data, and/or tools of theoretical economic modeling.

Interpretation: the student should be able to put findings into a theoretical, practical and ethical perspective. He or she should also be able to frankly reveal the limitations of own work and formulate critically constructive questions about the work of others.

Independence: the student must be able to work independently under supervision, and possess the intellectual capabilities required for self-directed learning to broach new if related areas of scientific inquiry.

Presentation: the student must be proficient in academic writing and expository presentation of results.

Domain: any area of economics, preferably where sufficient School expertise for supervision is available.

### **Onderwijsvorm**

Individual supervision by School member.

### **Toetsvorm**

Paper and presentation in public (single grade); subcriteria apply.

### **Literatuur**

n.a.

### **Vereiste voorkennis**

none.

### **Aanbevolen voorkennis**

Microeconomics and Methods; Public Economics and Policy; Economics for Policy Project.

### **Doelgroep**

Program participants MSc Economics (Public Policy track)

## **Time Series Econometrics**

<b>Vakcode</b>	E_EORM_TSE (64432000)
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. S.J. Koopman
<b>Examinator</b>	prof. dr. S.J. Koopman
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### **Doel vak**

To gain insights in economic and financial time series modelling with a focus on theory, methods and computations.

### **Inhoud vak**

This course focuses on theory, methodology and computational methods for a general class of time series state space models

The econometric methodology is explored in detail for a number of

selected topics in the time series analysis of economic and financial data.

In particular, dynamic model properties, model formulations, likelihood evaluations, signal extraction and Monte Carlo simulation methods are studied.

Theory and methods are developed in detail: derivations are studied which all start from basic principles in statistics and econometrics.

Various computer programs need to be developed for the implementation of the methods.

### Onderwijsvorm

lectures  
tutorials

### Toetsvorm

written exam  
written assignments

### Literatuur

Selection of literature:

- Brockwell, P.J. & R.A. Davis, Time Series: Theory and Methods. Second Edition, Springer-Verlag, 1991.
- Durbin, J. & S.J. Koopman, Time Series Analysis by State Space Methods. Second Edition, Oxford University Press, 2012.
- Selected papers.

## Urban Economic Challenges and Policies

<b>Vakcode</b>	E_STR_UECP ()
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	School of Business and Economics
<b>Coördinator</b>	prof. dr. J. Rouwendal
<b>Examinator</b>	prof. dr. J. Rouwendal
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### Doel vak

The aim of this course is to introduce the students to applications of urban economics to policy-relevant issues. After taking this course, students should be able to judge the strengths and weaknesses of using various economic tools and methods in concrete policy situations.

### Inhoud vak

In the course a number of relevant urban economics issues are analyzed using state-of-the art methods of urban economic analysis. The list is partly determined in a brainstorm session in which students are asked to suggest relevant topics. Subjects discussed include the current state-of-the art practice of hedonic price method for the valuation of non-market goods, the application of residential sorting models to urban policy questions, the study of social interactions (segregation, gentrification) in an urban context, clustering of firms within cities and the spatial structure of contemporary cities. Attention is paid to welfare economic issues (needed for policy evaluation), and econometric

methods (needed for appropriate analysis of causal relationships). Guest lectures provide a bridge between academic and policy-induced research. Towards the end of the course students write a short essay in which they propose appropriate policy measures to deal with a relevant urban economic issue.

**Onderwijsvorm**

Lectures, guest lectures and tutorials

**Toetsvorm**

Written exam (70%) and 3 assignments (3×10%)

**Literatuur**

Scientific papers and lecture notes

**Aanbevolen voorkennis**

Urban and Regional Economics.