



## Economics (MSc)

Vrije Universiteit Amsterdam - Fac. der Economische Wet. en Bedrijfsk. - M Economics - 2016-2017

The Master's programme in Economics is a high quality one-year programme designed for the professional economist. Questions illustrating the range of problems addressed by economics are for instance: How effective are large-scale public-sector retraining programmes in reducing unemployment? Why does poverty persist? How effective are government interventions designed to assist households exposed to income shocks? Does economic development imply the deterioration of the environment and bio-diversity, and how might this affect welfare in its broader sense? The Master's programme in Economics will equip students with the essential tools of economics and teach them how to apply these tools in real-life situations.

The Master Economics is a one year programme en consists of 60 EC.

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 (Developmental Economics, Global Challenges, International and Macroeconomic Policy, or Public Policy). 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. By choosing a certain fixed combinations of electives you can opt for an area of specialization. But you may also choose for no specialization.

[-Course programme 2016-2017 master Economics](#)

[-Academic calendar 2016-2017](#)

[-Teaching and Examination Regulations 2016-2017 Master programmes FEWEB](#)

[-Rules and Regulations 2016-2017 FEWEB](#)

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## Master Economics - Specialization Development Economics

This specialization contains two obligatory courses and an optional course. In addition, four courses plus a thesis are obligatory for all students.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [Master Economics - Specialization Development Economics - Obligatory courses](#)
- [M 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</a>	Ac. Jaar (september)	18.0	E_EC_THS

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

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

### M Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
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Economics of Climate Change	Periode 4	6.0	E_STR_ECC
Economics of the Welfare State	Periode 2	6.0	E_EC_EWS
Financial Markets and Institutions	Periode 4	6.0	E_FIN_FMI
Globalization, Growth and Development	Periode 4	6.0	E_EC_GGD
Human Development	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
Macroeconomic Policy in the EU	Periode 2	6.0	E_EC_MPEU
Microeconomics for Development	Periode 2	6.0	E_EC_MED
Regional and Urban Economics	Periode 2	6.0	E_STR_RUE
Time Series Econometrics	Periode 4	6.0	E_EORM_TSE
Transport Economics	Periode 4	6.0	E_STR_TREC

## Master Economics - Specialization Global Challenges

This specialization contains two obligatory courses and an optional course. In addition, four courses plus a thesis are obligatory for all students.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [M 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</a>	Ac. Jaar (september)	18.0	E_EC_THS

## M Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 4	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Financial Markets and Institutions</a>	Periode 4	6.0	E_FIN_FMI
<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_LABELC
<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="#">Regional and Urban Economics</a>	Periode 2	6.0	E_STR_RUE
<a href="#">Time Series Econometrics</a>	Periode 4	6.0	E_EORM_TSE
<a href="#">Transport Economics</a>	Periode 4	6.0	E_STR_TREC

## Master Economics - Specialization Global Challenges Master Economics - Obligatory courses

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 4	6.0	E_STR_ECC
<a href="#">Globalization, Growth and Development</a>	Periode 4	6.0	E_EC_GGD

## Master Economics - Specialization International and Macroeconomic Policy

This specialization contains two obligatory courses and an optional course. In addition, four courses plus a thesis are obligatory for all students.

Opleidingsdelen:

- Master Economics - Core courses
- M 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</a>	Ac. Jaar (september)	18.0	E_EC_THS

## M Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 4	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Financial Markets and Institutions</a>	Periode 4	6.0	E_FIN_FMI
<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="#">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="#">Regional and Urban Economics</a>	Periode 2	6.0	E_STR_RUE
<a href="#">Time Series Econometrics</a>	Periode 4	6.0	E_EORM_TSE
<a href="#">Transport Economics</a>	Periode 4	6.0	E_STR_TREC

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

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 Public Policy

This specialization contains two obligatory courses and an optional course. In addition, four courses plus a thesis are obligatory for all students.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [M Economics - Additional Electives](#)
- [Master Economics - Specialization Public 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</a>	Ac. Jaar (september)	18.0	E_EC_THS

## M Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
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Economics of Climate Change	Periode 4	6.0	E_STR_ECC
Economics of the Welfare State	Periode 2	6.0	E_EC_EWS
Financial Markets and Institutions	Periode 4	6.0	E_FIN_FMI
Globalization, Growth and Development	Periode 4	6.0	E_EC_GGD
Human Development	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
Macroeconomic Policy in the EU	Periode 2	6.0	E_EC_MPEU
Microeconomics for Development	Periode 2	6.0	E_EC_MED
Regional and Urban Economics	Periode 2	6.0	E_STR_RUE
Time Series Econometrics	Periode 4	6.0	E_EORM_TSE
Transport Economics	Periode 4	6.0	E_STR_TREC

## Master Economics - Specialization Public Policy - Obligatory courses

Vakken:

Naam	Periode	Credits	Code
Economics of the Welfare State	Periode 2	6.0	E_EC_EWS
Industrial Organization and Competition Policy	Periode 4	6.0	E_EC_IOCP

## Master Economics - No specialization

Choose 3 courses from the list, or (an) external course(s). In addition, four courses plus a thesis are obligatory for all students.

Opleidingsdelen:

- [Master Economics - Core courses](#)
- [M 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</a>	Ac. Jaar (september)	18.0	E_EC_THS

## M Economics - Additional Electives

Below are the elective courses.

Vakken:

Naam	Periode	Credits	Code
<a href="#">Economics of Climate Change</a>	Periode 4	6.0	E_STR_ECC
<a href="#">Economics of the Welfare State</a>	Periode 2	6.0	E_EC_EWS
<a href="#">Financial Markets and Institutions</a>	Periode 4	6.0	E_FIN_FMI
<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="#">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="#">Regional and Urban Economics</a>	Periode 2	6.0	E_STR_RUE
<a href="#">Time Series Econometrics</a>	Periode 4	6.0	E_EORM_TSE
<a href="#">Transport Economics</a>	Periode 4	6.0	E_STR_TREC

## Master Economics - Additional information

Opleidingsdelen:

- [Workshops](#)
- [Learning outcomes](#)
- [Teaching](#)
- [Enrolment for courses and exams](#)

## Workshops

Vakken:

Naam	Periode	Credits	Code
<a href="#">Math Refresher</a>		0.0	E_EC_MATHREF
<a href="#">Workshop Introduction to STATA</a>		0.0	E_EC_STATA

## Learning outcomes

The Master's programme in Economics is an academic programme that equips students with the essential tools of economics at an advanced level, and teaches them how to apply these principles to important, real-life policy tasks. The programme focuses on social issues and policy orientation and aims to turn students into economic generalists, while offering them the possibility to become specialists in well-defined focus areas (specializations). The programme aims at developing and testing students' economic intuition and analytical skills, emphasizing policy orientation and empirical applicability.

The programme has formulated three main objectives, which are:

- To increase students' generalist and specialist knowledge and understanding of economic theories, tools and academic competences, commensurate with the academic standards of and professional requirements for an internationally recognized and highly reputable master's degree.
- To produce graduates who can identify the economic dimensions of current policy issues.
- To transfer the required problem-solving skills so that graduates can successfully address future questions through independent economic research.

The programme offers several specializations. In order for all specializations to meet the objectives described above, a set of common learning outcomes was formulated:

### DISCIPLINARY KNOWLEDGE

Students will know the main defining principles, methodological cornerstones and tools in modern advanced microeconomics and macroeconomics, and possess applicable knowledge of core empirical methods and their statistical foundations.

Graduates will be aware of the normative aspects of economics as a discipline and the discipline's relation to other social sciences, humanities and arts.

### CRITICAL READERSHIP

Students are trained to read and understand important contributions to the literature of general economic analysis and of selected subfields and will have become critical readers.

### ANALYTICAL AND QUANTITATIVE SKILLS

Students will possess and develop analytical skills that will help them apply appropriate mathematical and empirical modelling tools. They will know how to translate economic hypotheses into statistical hypotheses and know how to apply statistical testing methodology.

Graduates are able to analyse and substantially interpret empirical economic data and will be capable of drawing policy conclusions where appropriate.

#### SOCIETAL AND CONTEXTUAL RELEVANCE

Graduates have a feel for how their skills and tools can be applied to finding answers to pertinent social, societal and economic problems. Students will have developed a critical attitude to the relevance and shortcomings of empirical data compared to theoretical requirements and will be aware of potential limitations to the insights that can be gained from theoretical reasoning alone when addressing real-life issues.

#### PROFESSIONAL INDEPENDENCE

Students will possess the skill of self-reflection, allowing them to independently identify and fill in any gaps in the knowledge they need to answer specific research questions and to acquire the use of new tools where necessary and appropriate to foray into unknown territory.

#### PROFESSIONAL SKILLS

Graduates will be able to identify relevant economic issues, formulate appropriate research questions and implement a plan for answering their question.

Graduates will be able to work both independently and with others in teams, and will be able to present their findings to both expert and non-expert audiences.

## Teaching

Tuition is carried out in plenary lectures and small groups. Much attention is paid to an active method of studying. This includes writing study papers, working out cases and preparing practical assignments. In this way students become familiar with the application of advanced theory to practical work. It also serves to integrate the theory studied in the individual courses into a comprehensive body of knowledge. Papers are written both individually and in groups of two or three students, thus furthering the students' ability to work in teams.

Much time is also devoted to presentation and discussion of one's work to fellow-students and staff and group discussion of e.g. research papers. The small-scale tuition environment provides an excellent opportunity for guidance and feedback by staff and other students. Apart from developing the student's communicative skills in oral and written presentation, much attention is paid to the development of critical judgement in assessing research work of others.

## Enrolment for courses and exams

See VU.net for more information about course enrolment.

## 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>	Fac. der Economische Wet. en Bedrijfsk.
<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
<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.

### 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>	Fac. der Economische Wet. en Bedrijfsk.
<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, this is only the case if (1) the exam grade is lower than the grade for the homework assignments, and (2) the exam grade exceeds 5.0. If both conditions are not met, the final grade is 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>	Fac. der Economische Wet. en Bedrijfsk.
<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

Students wishing 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 Blackboard.

## Economics of Climate Change

<b>Vakcode</b>	E_STR_ECC ()
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<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>	Fac. der Economische Wet. en Bedrijfsk.
<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, 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 paper assignments

### Toetsvorm

Written interim examination and presentations/papers

### Literatuur

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

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

## Financial Markets and Institutions

<b>Vakcode</b>	E_FIN_FMI (60442080)
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<b>Coördinator</b>	prof. dr. I.P.P. van Lelyveld
<b>Examinator</b>	prof. dr. I.P.P. van Lelyveld
<b>Docent(en)</b>	prof. dr. I.P.P. van Lelyveld
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

### Doel vak

The purpose of this course is to develop an understanding of the economics underlying financial intermediation, financial markets and banking, with a particular regard for current market developments and their consequences.

### Inhoud vak

We start by discussing the traditional role of commercial banks in the financial system and how banks manage risks. Topics include the major

risks faced by banks, lending and asymmetric information, credit rationing, and securitisation. This leads us into a discussion of financial fragility covering, inter alia, liquidity provision, bank runs, deposit insurance and opacity. Then we discuss how various regulations could be helpful or not.

Given the depth of the Great Financial Crisis (2007-2009), there has been a flurry in new regulation. What are the objectives of these regulations, are these or will these be met. Since traditionally regulation has been focussed on solvency will dedicate a lecture on liquidity as well as this has proven to be quite a separate type of risk. In addition we will discuss macroprudential and systemic risk regulations.

The next two lectures cover the plumbing of the system and other large institutional participants. The former lecture will provide us some understanding of how risks in the system not only originate with the actions (i.e., trades) but also with the markets are set up. The latter will discuss how, next to (investment) banks, other large institutional investors are coming to the fore.

In the final part of the course we will turn to three distinct markets: the derivatives market, the interbank and the international banking market. How do these markets operate, particularly in the crisis, and how are they evolving.

Two guest lectures from practitioners will provide more colour: DNB President Klaas Knot will cover central bank policy complemented by a lecture from a practitioner.

### **Onderwijsvorm**

The lectures will be complemented by a writing assignment (see below) All information regarding the timetable of the course can be found at <http://rooster.vu.nl>.

To facilitate the Writing Assignment a non-compulsory lecture on writing in English will be organised in the second week.

In the second week there will be an additional non-compulsory lecture to discuss question for those without a banking background (e.g. econometrics students).

Question should be raised on the Blackboard forum.

### **Toetsvorm**

Final grade is based on a closed-book written final exam (80%) and the grade on an open-book essay to be written in groups of at most three students (20%). More details regarding the topics and the structure of the essay will be provided during the lectures and tutorials. If no essay was submitted, it will be graded 0 (zero). In the case of a resit in later periods (i.e., in 2018 or later), the essay result will be disregarded and the resit grade will be based 100% on the examination. The exam questions will cover the topics and the exercises treated in the class. The lecture notes and solutions published on Blackboard can be used as a faithful guide for the required material and level of difficulty.

Part of understanding is being able to present your findings. In many cases, getting the form right is just as important as the actual content. Findings can be presented in many ways. For example, as an academic article, a thesis, a Powerpoint or a column. In this writing assignment we will aim for a contribution to a policy oriented blog such as VoxEU ([www.voxeu.org](http://www.voxeu.org)).

Currently the topic is set to be the split between investment banking (the casino) from retail banking (the utility). Such a split has been argued to increase financial stability and reduce moral hazard. However, if a more interesting policy question arises closer to the course, the topic might change.

The assignment should be written in groups of at most three. Please use the appropriate sign up tool on Blackboard. Further details will be given in the first lecture. Note that a non-compulsory lecture on writing in English will be planned in the first week.

The deadline for the assignment will be announced in the first lecture.

### Literatuur

We will make use of the following non-mandatory textbook:

- Mishkin, F., K. Matthews, and M. Giuliadori, The Economics of Money, Banking and Finance, European edition. From this book we will cover all of Chapters 8 through 12.

In addition several mandatory academic papers will be posted to Blackboard.

Lecture notes will be available on Blackboard just before each class.

Solutions for all exercises will be available after lectures.

Other non-mandatory (but useful) materials such as academic papers, press articles or book titles will be posted on Blackboard.

### Vereiste voorkennis

Students should have followed a bachelor course in Money and Banking.

## 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>	Fac. der Economische Wet. en Bedrijfsk.
<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>	Fac. der Economische Wet. en Bedrijfsk.
<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>	Fac. der Economische Wet. en Bedrijfsk.
<b>Coördinator</b>	dr. E.I. Motchenkova
<b>Examinator</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.

### 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>	Fac. der Economische Wet. en Bedrijfsk.
<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 and of human capital theory (disciplinary knowledge & analytical and quantitative skills).
- Understanding how institutional forces and technological change shape labor market performance (disciplinary knowledge & analytical and quantitative skills).
- Understanding the impact of policy instruments on the search behavior of individuals (disciplinary knowledge & societal and contextual relevance).
- 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

concentrate on earnings inequality and technological change. These topics are politically and economically important and underscore a lot of modern labor economics. We focus on human capital investment models. We conclude with an analysis of labor market institutions, in particular the design of active labor market policies.

### 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".

## 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>	Fac. der Economische Wet. en Bedrijfsk.
<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 11%. 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 this course we will study Macroeconomic Policy in the EU, covering

monetary policy, fiscal policy, and financial policy. To develop a well-rounded understanding of the issues, we will study relevant economic theories, examine the pertinent empirical evidence, and take into account key institutional aspects. The key objective of the course is to develop your ability to contribute to the debate about macroeconomic policy in Europe based on solid economic insights and analysis. You will practice this ability along with your writing skills through the development of a policy brief.

### Onderwijsvorm

Discussion of Readings, Assignments, Lecture

### Toetsvorm

Open Exam, Case/paper Group (Policy Brief)

### Literatuur

There is no textbook. The readings consist primarily of academic articles.

### Vereiste voorkennis

Bachelor economics or another bachelor plus premaster.

### Aanbevolen voorkennis

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

## Math Refresher

<b>Vakcode</b>	E_EC_MATHREF ()
<b>Credits</b>	0.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<b>Coördinator</b>	S. Kucinskas MPhil
<b>Examinator</b>	S. Kucinskas MPhil
<b>Lesmethode(n)</b>	Hoorcollege

### Inhoud vak

In the programmes of the MSc Economics and the MSc Spatial, Transport and Environmental Economics (STREEM) a certain level of knowledge on mathematics is assumed. The Math Refresher aims at refreshing this knowledge, so that the math used in the courses will be no obstacle to complete the courses of the programme successfully.

The Math Refresher consists of three lectures and three exercise classes, all in one week. This is the week before the courses in the first block start.

In these three lectures all necessary topics will be covered. The exercises classes offer the opportunity to students to ask questions about the homework exercises.

As the Math Refresher is an optional preparatory course, students cannot earn credits for this course and there will also be no examination.

Students are free to attend only those lectures that discuss the topics they need to refresh.

The topics that will be covered are:

- Topic 1: functions and their properties, differentiation and

integration

- Topic 2: exponential growth and present value, optimization (Lagrange, Kuhn-Tucker)
- Topic 3: basics of linear algebra, probability (distributions, moments)

You don't need to enroll for the Math Refresher, just come to the class. For the schedule please look at blackboard.

### Onderwijsvorm

lecture  
exercise classes

### Toetsvorm

There is no assessment

### Literatuur

This preparatory course does not use a particular textbook. As background reading any textbook on mathematics for economists will do. If you don't have such a textbook and want to buy one:  
Knut Sydsaeter & Peter Hammond, Essential Mathematics for Economic Analysis. Prentice Hall.

### Overige informatie

This course will take place in the last week of August. See blackboard for more information and course materials.

## 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>	Fac. der Economische Wet. en Bedrijfsk.
<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)

## Regional and Urban Economics

<b>Vakcode</b>	E_STR_RUE (60442140)
<b>Periode</b>	Periode 2
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<b>Coördinator</b>	prof. dr. H.L.F. de Groot
<b>Examinator</b>	prof. dr. H.L.F. de Groot
<b>Docent(en)</b>	prof. dr. H.L.F. de Groot, prof. dr. J. Rouwendal
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

**Doel vak**

The aim of this course is to provide students with an advanced introduction in the field of regional and urban economics. Students learn the theoretical and empirical methods applied in the field, and get a good understanding of the fundamental questions that are addressed in the field and the current state of affairs in the literature. They are trained to critically read and properly understand contributions in the leading journals in the field. At a more specific level, after having taken this course, students have a good understanding of the New Economic Geography Model, are familiar with the theoretical foundations of agglomeration economies and their empirical relevance, understand the theoretical foundations of and can apply spatial interaction modelling, are familiar with regional growth theories, understand the function of regional labour and housing markets, and have a good understanding of the determinants of urban structures.

## Inhoud vak

This course covers advanced topics in theoretical and empirical research on regional and urban economics. Key issues are location and potential reasons for clustering of economic activity, spatial interaction (migration, trade, FDI and commuting), patterns of regional economic convergence and divergence, the role of geographic factors in explaining regional economic growth performance, the impact of (spatial) externalities of knowledge production, urban size and growth, urban land use, housing markets and the functioning of regional labour markets. The topics are addressed from a theoretical as well as an empirical perspective.

## Onderwijsvorm

Lectures and Tutorials

## Toetsvorm

Written exam (70 percent; individual assessment) and Assignments (30 percent; group assessment). A minimum grade of 5.0 for the exam is required.

## Literatuur

- Brakman, S., J.H. Garretsen and C. van Marrewijk (2009): *The New Introduction to Geographical Economics*, Cambridge University Press, Cambridge.
- Ciccone, A. and R.E. Hall (1996): 'Productivity and the Density of Economic Activity', *American Economic Review*, 86, pp. 54-70.
- Gallup, J.L., J.D. Sachs and A.D. Mellinger (1999): 'Geography and Economic Development', *International Regional Science Review*, 22, pp. 179-232.
- Glaeser, E.L. and M.E. Kahn (2003): 'Sprawl and Urban Growth', in: J.V. Henderson and J.-F. Thisse (eds), *Handbook of Urban and Regional Economics*, Volume 4, Chapter 56, Elsevier, Amsterdam.
- Glaeser, E.L., H.D. Kallal, J.A. Scheinkman and A. Shleifer (1992): 'Growth in Cities', *Journal of Political Economy*, 100, pp. 1126-1151.
- Krugman, P. (1991): 'History and Industry Location: The Case of the US Manufacturing Belt', *American Economic Review*, 81, pp. 80-83.

## 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>	Fac. der Economische Wet. en Bedrijfsk.
<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 faculty 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 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. 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 faculty.

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

### **Onderwijsvorm**

Individual supervision by faculty 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**

<b>Vakcode</b>	E_EC_THS ()
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<b>Periode</b>	Ac. Jaar (september)
<b>Credits</b>	18.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<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 faculty 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 faculty

expertise for supervision is available.

### Onderwijsvorm

Individual supervision by faculty 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;

## 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>	Fac. der Economische Wet. en Bedrijfsk.
<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 time series modelling with a focus on theory, methods and computations.

### Inhoud vak

This course focuses on the advances of theory and computational methods for time series econometrics. A methodology of econometric programming is explored for a number of selected topics in time series analysis. In particular, time series properties in time and frequency domains, different modeling strategies, likelihood evaluations, filtering methods and Monte Carlo simulation methods are studied. Theory and methods are studied thoroughly while some computer programs need to be developed for the implementation of the methods.

### Onderwijsvorm

lecture  
tutorial

## Toetsvorm

written interim examination  
50 percent  
written assignments  
50 percent

## Literatuur

Selection of literature:

- Brockwell, P.J. & R.A. Davis, Time Series: Theory and Methods. Springer-Verlag, 1991, 2nd edition.
- Durbin, J. & S.J. Koopman, Time Series Analysis by State Space Methods. Oxford University Press, 2001.
- Kim, C-J & C.R. Nelson, State-Space Models with Regime Switching. The MIT Press, 1999.

## Transport Economics

<b>Vakcode</b>	E_STR_TREC (60432050)
<b>Periode</b>	Periode 4
<b>Credits</b>	6.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<b>Coördinator</b>	dr. A.J.H. Pels
<b>Examinator</b>	dr. A.J.H. Pels
<b>Docent(en)</b>	dr. A.J.H. Pels
<b>Lesmethode(n)</b>	Hoorcollege
<b>Niveau</b>	400

## Doel vak

The aim of this course is to provide students with an advanced knowledge of contemporary transport economics, considering both intra-city transport (e.g. congested road traffic, urban transit) and inter-city transport (notably aviation). Students

- learn theoretical and empirical methods applied in the field of transport economics and in related fields, such as transport planning.
  - get a good understanding of the fundamental policy questions that are addressed in the field, and the methods with which these are addressed.
  - learn the current state of affairs in the literature.
- are trained to critically read and properly understand contributions in the leading journals in the field.

## Inhoud vak

This course covers advanced topics in theoretical and empirical research on urban transport economics. Key issues are demand analysis; cost functions and scale economies for various modes; congestion analysis in static and dynamic formulations; network equilibrium and optimum for deterministic and stochastic network models; first-best and second-best pricing in static and dynamic networks; investment analysis under first-best and second-best pricing; and industrial organization aspects of intra-city (e.g. roads and transit) and inter-city (e.g. airports and airlines) transport. The topics are addressed from a theoretical as well as an empirical perspective.

**Toetsvorm**

written interim examination: 70 percent  
 assignments: 30 percent (paper review tutorial 10 percent, network optimization tutorial 10 percent, methods tutorial 10 percent)

**Literatuur**

- Small, K.A. and E.T. Verhoef, The Economics of Urban Transportation. Routledge, 2007.  
 - Additional literature for more specialized topics will be announced at the start of the course.

**Aanbevolen voorkennis**

Microeconomics for spatial policy or a similar course

**Workshop Introduction to STATA**

<b>Vakcode</b>	E_EC_STATA ()
<b>Credits</b>	0.0
<b>Voertaal</b>	Engels
<b>Faculteit</b>	Fac. der Economische Wet. en Bedrijfsk.
<b>Coördinator</b>	Z. Deng
<b>Examinator</b>	Z. Deng
<b>Lesmethode(n)</b>	Hoorcollege

**Inhoud vak**

In the courses Advanced Methods for Applied Economic Research and Advanced Methods for Applied Spatial Economic Research you will work on homework assignments using the software package STATA. The Workshop Introduction to STATA is aimed at students that are not familiar with this software.

Students will be introduced to the main features of Stata, straddling basics of data management, data description and data analysis. Teaching will (partly) be conducted hands-on in a computerlab.

**Onderwijsvorm**

instruction  
 hands-on session in computerlab

**Toetsvorm**

There is no assessment

**Literatuur**

This preparatory course uses the Introduction to STATA guide that can be downloaded from blackboard.

**Overige informatie**

This course will take place in the last week of August. See blackboard for more information and course materials.