At the end of the fall semester, students choose one of the following areas of specialisation:

- 1. Governance of Innovation
- 2. Social Protection Policy
- 3. Migration Studies
- 4. Global Governance for Development

The programme director and the specialisation coordinators are available to assist students with the selection of specialisations, taking into account preferences, career goals and previous training.



Specialisation videos

Governance of Innovation -- Master's in Public Policy and Human Development (subtitles)

Video of Governance of Innovation -- Master's in Public Policy and Human Development (subtitles)

The Governance of Innovation

The Governance of Innovation specialisation focuses on the rapid emergence of new and different technologies, and the challenges that arise from their integration into society.

Students will gain a systemic understanding of the economic, social, and political actors and structures that are impacted by new technologies, and develop skills to maximise their benefits and minimise social costs.

This specialisation covers the economic fundamentals of innovation, policy instruments, appropriate policy responses, and social impacts of new technologies. Theory is combined with practice, with opportunities to learn from recognised policymakers and staff from leading international organisations. Courses can also include field trips!

"It's not just about the technologies themselves, it's much more about actually how technology has an effect and how it can help us in the future." - Ross Mudie, student

Social Protection Policy -- Master's in Public Policy and Human Development (subtitles)

Video of Social Protection Policy -- Master's in Public Policy and Human Development (subtitles)

Social Protection Policy

Poverty, vulnerability, inequality and exclusion are global challenges that require extensive policy intervention if effective and sustainable solutions are to be found. In particular, social protection policy has gained momentum as a necessary component for improving well-being and creating inclusive societies.

This specialisation provides an interdisciplinary, in-depth examination of social protection policies, frameworks, systems, interventions and instruments. It provides students with a toolbox to understand and tackle related public policy issues by applying traditional and emerging theories whilst incorporating local, regional and international contexts.

Students are exposed to real-life case studies and learn how to identify social challenges from a public policy lens and use methods and measurement techniques to design, evaluate and analyse intervention and implementation options.

This specialisation covers topics such as poverty and inequality; social risks and vulnerabilities; the political economy of social protection; policy interventions and instruments; the nature and economics of welfare state models; rights-based approaches; demographic, economic and social challenges; and social design and social budgeting.

"I would like to reduce inequality in my country, which is one of the most important challenges that we are facing. Social protection is about improving the well-being of the most disadvantaged populations. The specialisation gives you the skills to formulate a proposal that is technically viable but also politically feasible. This is exactly what I was looking for." - Romina Rojas, student

Read more on the UNU MERIT website

<u>Migration Studies -- Master's in Public Policy and Human</u> <u>Development (subtitles)</u>

Video of Migration Studies -- Master's in Public Policy and Human Development (subtitles)

Migration Studies

Migration is a pressing topic in development, welfare, and immigration policy with around 281 million migrants worldwide, making up approximately 3.5% of the world population.

Remittance transfers - the money that migrants send back to their home countries - exceeded USD 540 billion in 2020, surpassing foreign direct investment and official development aid in many countries. The impact of migration on migrants, their families, and their communities in both the origin and destination countries is controversial and must therefore be carefully examined.

This specialisation introduces students to the essential components of migration studies, including trends, theories, causes and effects, data collection and analysis and migration policy and governance. Students will have the opportunity to explore migration studies by taking courses with a broad perspective on the prevailing theory and practice with a particular emphasis on practical fieldwork.

The Migration Studies specialisation prepares students for careers in policy advising, research, and other roles for governments, international organizations, or academic institutions.

"I had professional experience in the field of migration but I needed to acquire the academic knowledge of the concept of migration and why people migrate. Maastricht University is one of the few universities that focuses on Migration as a specialisation. I want to contribute to achieve a safer environment for all." - Soha Youssef, student

Read more on the UNU MERIT website

Global Governance for Development -- Master's in Public Policy and Human Development (MPP)

Video of Global Governance for Development -- Master's in Public Policy and Human Development (MPP)

Global Governance for Development

The Sustainable Development Agenda 2030 (adopted by the UN) is a driving force behind the political, institutional, economic, environmental and security conditions necessary for social change and improving human life worldwide. However, globalisation poses increasing complexity due to various challenges, such as climate change, trade protectionism and human rights violations.

This specialisation offers advanced analytical knowledge and professional skills necessary for participating in the global governance of developmental policies. The course covers the 'five P' dimensions of the SDGs (people, prosperity, peace, planet and partnerships) and offers interdisciplinary study of international relations, political science, economics and law.

Through engagement with experts and practitioners from different international organisations, students will be prepared to begin their careers in international organisations, public administration, nonprofit entities, or the private sector as future professionals in global development.

Read more on the UNU MERIT website

What do our students and course coordinators say about their specialisation?

- The Governance of Innovation
- Social Protection Policy
- Migration Studies

• Global Governance for Development

Core Substantive Courses Maastricht Graduate School of Governance

Public Policy

Full course description

This course serves as common ground for the Master of Public Policy and Human Development (MPP). It introduces students to the main concepts and dynamics of public policy that will be deepened further in the succeeding courses. The course introduces the policy process, the politics of public policy, the role of actors/stakeholders in the policy process and strategies to facilitate public policy success. The course draws from contemporary case study, examples from countries worldwide and adopts an interdisciplinary theoretical perspective in its delivery. Public policy is examined as a process, introducing students to the crux of problem framing, stakeholder analysis and a systematic way to understand public policy decisions while allowing insightful discussions. This course examines how policies are formulated, implemented and evaluated, emphasizing the roles of multiple actors along the policy process.

Course objectives

The course aims to understand how and by whom public policy is made through the perspective of different theories. Additionally, the course aims at training students to improve their communication skills (verbal and written) and team performance.

Prerequisites

(none)

Recommended reading

• Recommended readings for each lecture will be reported in the course manual

MPP4301 Period 1 2 Sep 2024 25 Oct 2024 Print course description ECTS credits:

4.0

Instruction language:

English

Coordinator:

• E.W. Lebon - McGregor

Teaching methods:

Assignment(s), Lecture(s), PBL, Work in subgroups, Presentations

Assessment methods: Participation, Final paper

Keywords:

Actors; Governance; Public Policy; Policy Process

Maastricht Graduate School of Governance

Public Economics

Full course description

This course analyses the public sector, including the allocation of resources and the redistribution of income. It discusses the role of the public sector, the difference between private and public goods, public choice and externalities. Tax policy is introduced, relying on two broad principles: equity and efficiency. The key public expenditure categories are analysed. Finally, the course looks at the situation of developing countries and the role of public finance in such a context.

Course objectives

The aim of this course is to allow students to understand the role of the government and the way public sector intervention influences individuals and the economy. This is achieved by applying the tools of microeconomic and macroeconomic analysis to government actions, both on the revenue and the expenditure side. After completing this course, students should be able to:

- Describe the key concepts in the field of public economics
- Identify and discuss policy problems, explain market failures and provide policy responses
- Analyse the functioning of key tax instruments and expenditure programmes
- Analyse and explain the impact of government intervention on development and socioeconomic indicators

Prerequisites

(none)

Recommended reading

• Gruber, Jonathan. 2015. Public Finance and Public Policy, 5th edition. Worth. ISBN: 978-1464143335.

Students may use other editions (3rd or 4th) of the book. We provide the chapter/section titles below, so students can match them with the book they have.

Moreover, some chapters are extracted from:

- Atkinson, A. B. (2015). Inequality: What can be done?. Harvard University Press.
- Banerjee, A., and Duflo, E. (2011). Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty. New York: Public Affairs.
- Piketty, T. (2014). Capital in the twenty-first century. Harvard University Press.

MPP4302

Period 1

30 Sep 2024 25 Oct 2024

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• B. Martorano

Teaching methods:

Lecture(s), PBL, Presentation(s)

Assessment methods:

Participation, Presentation, Written exam

Keywords:

Public Economics; Taxation; Public expenditure; Redistribution; Inequality

Maastricht Graduate School of Governance

Public Policy Analysis

Full course description

Formulation, implementation and evaluation of public policies are an important responsibility of modern governments. Policy objectives and instruments are determined in the interactions between public authorities and stakeholders. Actors and institutions such as branches of government (including the executive, legislative, and judiciary), political parties, interest groups, regulatory agencies, non-governmental organisations and citizens are involved in policymaking to varying degrees, depending on the particular policy domain and phase of the policy process. In this course, students will explore ways in which public policies and their impact are analysed using quantitative and qualitative methods. The results serve as a basis to formulate informed evidence-based policies, or to improve existing policies.

The aim of this course is to provide a practical introduction to students to learn and understand how public policy is analysed and communicated. In particular, it is designed to develop the skills required to critically analyse policy issues, evaluate current programmes, and articulate relevant policy recommendations.

Course objectives

- Assess and apply different measures and concepts of poverty and inequality
- Explain basic concepts related to Survey Design
- Evaluate the advantages and limitations of impact evaluation analysis in terms of causality
- Select and apply experimental and non-experimental methods in their research problems
- Select and apply qualitative approaches used as complementary tools in impact evaluation
- Analyse results and translate into policy recommendations

Prerequisites

Participation in the quantitative track during periods 1a and 1b

- Attendance of the course of Public Economics (MPP4302)
- Attendance of the course of Public Policy (MPP4301)

Recommended reading

- Gertler P., Martinez S., Premand P., Rawlings L. and C. Vermeersch (2016). Impact Evaluation in Practice, Second Edition. Washington DC: The World Bank.
- Haughton J. and S. Khandker (2009). Handbook on Poverty and Inequality. Washington DC: The World Bank.
- Stock, J. H. and M. W. Watson (2015), Introduction to Econometrics, Update, 3rd Edition
- Additional recommended readings for each lecture will be reported in the course manual.

MPP4504 Period 2

28 Oct 2024

19 Dec 2024

Print course description

ECTS credits:

8.0

Instruction language:

English

Coordinator:

• B. Martorano

Teaching methods:

Lecture(s), PBL

Assessment methods:

Assignment

Keywords:

Poverty and Inequality Analysis; Impact evaluation; Evidence-based decision making

Core Skills Courses

Maastricht Graduate School of Governance

Methods for Policy Analysis

Full course description

This course aims to familiarise students with the foundations of evaluating and designing academic, policy-relevant social science research. The course familiarises students with the process of designing their own research projects (such as their Master's thesis), leading them through the intuition behind specific research design approaches that will support alignment among components such as research questions, methodological approach, theory, data, and data collection/analysis methods. The course will combine theoretical knowledge and hands-on applications, with students encouraged to build up the intuition and reasoning behind specific research design choices through lectures and tutorials focusing on study cases.

The study cases expose students to qualitative and quantitative methodological approaches, and students will focus in this course (which is the first of two skills courses) on building and consolidating knowledge related to quantitative methodological approaches. Hence, students will learn how to clean data and to describe its properties using statistics and visualization. The course

also introduces basic forms of inferential statistics and ordinary least squares regression. Throughout the course, the Stata statistical package will be used, and students will build up hard skills related to this programme. The course prepares the student directly for Advanced Methods for Policy Analysis and Public Policy Analysis.

Course objectives

- 1. Construct relevant research problem framings and appropriate research questions to guide research within the public policy cycle;
- 2. Understand the role of theory in policy-relevant research, and use theory to guide research choices;
- 3. Propose appropriate methodological approaches for addressing specific policy-relevant research objectives;
- 4. Use Stata to extract relevant information from data using basic summary and inferential statistics, and;
- 5. Estimate and interpret OLS models to test policy-relevant research questions.

Prerequisites

None.

Recommended reading

- Smith, Gary. 2015. Essential Statistics, Regression, and Econometrics, 2nd edition. San Diego, CA: Academic Press
- Stock & Watson (2019), Introduction to Econometrics, 4th Ed. Pearson Education Limited
- Matthews, R., & Ross, E. (2010). Research methods: A practical guide for the social sciences. Pearson Education Ltd

SKL4106

Period 1

2 Sep 2024

25 Oct 2024

Print course description

ECTS credits:

6.0

Instruction language:

English

Coordinators:

- Talitha Dubow
- Osei Kwadwo Victor
- L.F. Krebs

Teaching methods:

Assignment(s), Paper(s), Work in subgroups, Presentations, Research, Skills

Assessment methods:

Attendance, Presentation and paper, Written exam

Keywords:

Research design; Methodology; Methods; Qualitative; Quantitative; Theory; Samples; Quality criteria; Operationalization; Measurement, variable and data; Data visualization; Descriptive

statistics; Probability theory; Confidence intervals; Hypothesis tests; OLS regression; Stata. Maastricht Graduate School of Governance

Advanced Methods for Policy-Relevant Research and Analysis

Full course description

This course builds on the foundation laid by Methods for Policy Analysis and aims to equip students with the methodological knowledge to start their thesis research and the specialisation track. A first module on quantitative research approaches furthers students' understanding of selected models in regression analysis (probit, multinomial, ordered probit), including with regard to panel data and associated quality criteria. A module on qualitative research provides students with a more in-depth understanding of qualitative research methods and associated quality criteria, while the practical exercises and assignment focus on building students' skills to conduct and analyse interviews. Advanced Methods for Policy-Relevant Research and Analysis also gives students a more detailed understanding of research ethics and data management principles, and introduces the methodological theory and philosophical positionings that serve to deepen students' understanding of both quantitative and qualitative research.

Course objectives

- Understand and apply appropriate research ethics principles
- · Apply causal inference framework to critically assess validity of a study
- Apply appropriate regression technique and model frameworks for public policy analysis
- Choose from and evaluate different qualitative approaches for policy-relevant research
- Conduct and analyse qualitative interviews

Prerequisites

SKL4106 Methods for Policy Analysis.

Recommended reading

- Stock & Watson (2019), Introduction to Econometrics, 4th Ed. Pearson Education Limited
- Matthews, R., & Ross, E. (2010). Research methods: A practical guide for the social sciences. Pearson Education Ltd

SKI.4205

Period 2

28 Oct 2024

19 Dec 2024

Print course description

ECTS credits:

6.0

Instruction language:

English

Coordinators:

- V. Osei Kwadwo
- P.H. Wong

Teaching methods:

Work in subgroups, Assignment(s), Paper(s), Research, Skills

Assessment methods:

Written exam, Attendance, Final paper

Keywords:

Philosophy of science; Research paradigms; Research ethics; Multi- and mixed-methods research; Internal and external validity; Endogeneity; Causality; Nonlinear effects; Probit; Panel data; Survey; Interviews; Thematic analysis; Atlas.Ti; Stata

Specialisation courses

Specialisation Migration Studies

Maastricht Graduate School of Governance

Introduction to Migration Studies

Full course description

This course serves to understand the basics of migration and migration studies. What really motivates people to migrate? This course gives an introduction into the field of migration studies. Preparing students for the more focused courses that will follow, the introduction covers such topics as the flows and trends in migration and remittances, demography and historical developments, theories of migration from different disciplines such as economics and sociology, different types of migrants and generational issues, an internal migration and to forced migration. Each week in the course has a special theme.

Course objectives

This course aims at making sure students have a basic understanding of terms, definitions and concepts in migration studies. Specifically, students will be able to think critically about the different types of migrants and reasons for migration and well as knowing basic facts about where migrants come from, where they go and how money is sent from country to country by migrants. After completing this course, students should be able to work under pressure and have improved their time management skills using a real life scenario.

By the end of this course, students should be able to:

- Identify and critically reflect on different types of migrants and reasons for migration and recall basic facts about where migrants come from, where they goand how money is sent from country to country by migrants
- work under pressure and demonstrate effective time management skills using a real life scenario of completing a migration profile
- analyse the leading theories in the field of migration studies
- analyse forced migration in a historical and current context
- to undertake analytical and independent research

Prerequisites

None

Recommended reading

- · Course reader
- Hein de Haas, Castles, Stephen, and Mark. J. Miller. 2020. The Age of Migration: International Population Movements in the Modern World. 6th revised edition. Red Globe Press
- Koser, K. (2016) International Migration: A very short Introduction. Oxford: Oxford University Press.

MGR4105

Period 4

3 Feb 2025

28 Feb 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• M.J. Siegel

Teaching methods:

Paper(s), Assignment(s), Research, Skills, Work in subgroups

Assessment methods:

Final paper, Participation, Presentation, Assessment

Keywords:

Migration; Immigration; Emigration; Migrant; Refugee; Remittances, Theory, Forced Migration

Maastricht Graduate School of Governance

Migration and Remittance Effects

Full course description

Is migration good or bad for the migrant receiving country and what effects does it have on the sending country? What about the money sent by migrants back to their home countries? Does this have only positive effects? How can we understand and evaluate the effects of migration on development and development on migration? These are some of the issues that are touched on in this course. Special attention is paid to poverty, inequality, labour markets, education, health, corruption and innovation. We will also zoom on specific effects of diaspora on peace and security. These topics will be dealt with in a series called 'Migration &', which explores the linkages between migration and several other topics (i.e. poverty, health, corruption, etc).

Course objectives

This follows on the first course in the Migration Specialization. Now that students have a good idea of migration basics, in this course we will look at the effects of migration and remittances.

Specifically, students will be able to think critically about the different (both positive and negative effects) of migration. After completing this course, students should be able to work under pressure and have improved their time management skills using a real life scenario.

By the end of this course, students should be able to

- analyse how migration interacts with (affects and is affected by) other aspects of development and other public policy issues (health, education, poverty, inequality, corruption, labour markets, the welfare state, etc.)
- describe how migration is connected to the sustainable development goals
- analyse the effects of migration on innovation and labour markets in countries of origin and destination
- describe how governments engage their diaspora through different types of policies
- evaluate the interventions of diaspora as peace wrecking or peacebuilding through the presentation of a specific case

Prerequisites

None

Recommended reading

- Course reader
- Hein de Haas, Castles, Stephen, and Mark. J. Miller. 2020. The Age of Migration: International Population Movements in the Modern World. 6th revised edition. Red Globe Press

MGR4206

Period 4

10 Mar 2025

4 Apr 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• M.J. Siegel

Teaching methods:

Assignment(s), Work in subgroups, Research, Presentations

Assessment methods:

Oral exam, Presentation and paper

Keywords:

Migration; Remittances; Development; Immigration; Emigration; Poverty; Inequality; Migration

Effects

Maastricht Graduate School of Governance

The Migration Lifecycle: Journeys, Integration, Return

Full course description

This course provides a further examination of the migration lifecycle including migration journeys, immigrant incorporation; return migration and reintegration. The first module explores irregular migration, including irregular migrants' journeys, experiences of irregular stay in a destination country, and related policies. The second module focuses on modes of immigrant incorporation, with an overview of related theories (e.g. integration, assimilation and transnationalism), policies and experiences. The third and fourth modules explore return migration including decision-making, experiences, and related policies.

Course objectives

- 1. Understand the complexity of migration processes and experiences at different stages of the migration "lifecycle"
- 2. Identify and analyse the relationships between migration processes, experiences and outcomes at different stages of the migration "lifecycle"
- 3. Understand, compare, critique and apply theoretical perspectives on irregular migration, immigrant incorporation and return migration
- 4. Drawing on relevant theory and empirical data, critically evaluate policies and policy positions concerning irregular migration, immigrant incorporation and return migration
- 5. Use self-reflection and peer feedback to strengthen effective and efficient team performance

Prerequisites

None

Recommended reading

The recommended readings differ per week and topic. Students will find the recommended readings in the course manual and on Canvas.

MGR4309

Period 5

14 Apr 2025

9 May 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• T.R. Mortimer Dubow

Teaching methods:

Lecture(s), PBL, Assignment(s), Research, Presentations, Work in subgroups

Assessment methods:

Presentation and paper

Keywords:

Incorporation; Irregular Migration; Return Migration; Reintegration

Comparative Migration Policy

Full course description

The final course in the migration specialisation deals with migration governance and policy. Migration policy is a critical topic in many countries and of great importance to political parties and a feature of many elections. The course focuses on exploring migration policy from a comparative perspective through the examination of the policies and positions of different actors across different levels of governance on contemporary migration issues. Students learn about the history of global migration governance, develop indicators to compare policies, and critically examine the different approaches of governments to key migration-related policies issues. Special emphasis is placed on developing and formulating evidence-based policy recommendations and preparing students to enter the labour market.

Course objectives

This course aims at applying knowledge gained throughout the MPP to explore contemporary migration policy issues from a comparative perspective and develop clear policy recommendations. After completing this course, students should be able to:

- Critically discuss the role of different actors and policy frames in different areas of migration policy and their influence on policy development.
- Develop, implement, and critically evaluate indicators to compare migration policies across different country contexts
- Evaluate the migration policy landscape in a selected country and identify normative and implementation gaps.
- Formulate clear, evidence-based policy recommendations.
- Enter their job search in a migration related field evidenced by having prepared a professional CV and cover letter, and participated in a job interview

Prerequisites

None

Recommended reading

Recommended readings will be provided in the course manual

MGR4408
Period 5
12 May 2025
6 Jun 2025
Print course description
ECTS credits:
4.0
Instruction language:

English

Master Public Policy and Human Development Coordinators:

- M.J. Siegel
- E.W. Lebon McGregor

Teaching methods:

Assignment(s), Presentation(s), Paper(s), Research, Work in subgroups

Assessment methods:

Participation, Assessment, Final paper

Keywords:

Migration; Migration Policy; Migration Governance

Specialisation Global Governance for Development

Maastricht Graduate School of Governance

Global Governance and Human Development

Full course description

Human development is profoundly influenced by the rules set in international agreements. Global governance has the potential to address some of the most difficult policy challenges that affect people and communities across the globe. Negotiating policy solutions at a global level however presents a challenge of its own. This first course of the specialisation on Global Governance for Development explores the role of global governance institutions in fostering the development of human potential and equality. Working with a real-life case study, the participants of the course will examine the roles, structure and functioning of global governance institutions. They will get an opportunity to develop and exercise, in a simulated setting, a set of skills relevant for working in an international environment, and gain experience of negotiating a global treaty on artificial intelligence that safeguards fundamental human rights.

The course 'Global Governance and Human Development' consists of a series of topical lectures and workshops complemented by hands-on tutorials. In tutorials, students will work both independently and jointly, and combine their theoretical and policy-relevant knowledge to advance the case study of global governance of artificial intelligence in the context of human rights. Week one of the course will introduce the global governance system and examine the roles and mandates that various global actors, including international organisations, governments, and non-state actors, have in addressing human development. Students will learn about the foundations of the United Nations (UN) system and get to know how select UN bodies function. A workshop on policy brief and memo writing will offer practical tools for preparing written policy documents such as background briefs and negotiation position memoranda.

In week two, students will explore the challenges that artificial intelligence poses to human development and human rights, and learn about the current state of global governance of artificial intelligence. In week three, they will explore the potential for participatory global governance and work with a draft of a global agreement. Two workshops on international negotiations will equip course participants with the skills crucial for policy cooperation in a global multi-stakeholder context. In the last week of the course, students will put their acquired skills to a practical test in a simulated negotiation of a global treaty. The concluding session will bring together the theoretical insights, analytical considerations, and lessons learnt from the negotiation exercise and the case study.

Course objectives

- Identify relevant global governance organisations and transnational efforts that address human development objectives
- Use appropriate analytical and policy tools to explain, assess and design multi-stakeholder efforts fostering human development
- Develop, plan, execute and reflect on the application of tailor-made negotiation strategies in a multi-stakeholder international environment
- Find and use open source information to develop policy positions and prepare effective policy memoranda

Prerequisites

None

Recommended reading

A reader will be prepared with the literature relevant for each class.

General literature:

- Browne, Stephen and Thomas G. Weiss (eds.) (2021) Routledge Handbook on the UN and Development, Routledge.
- Nelson, Paul (2021) Global Development and Human Rights: The Sustainable Development Goals and Beyond, University of Toronto Press.
- Ponzio, Richard and Arunabha Ghosh (2016) Human Development and Global Institutions: Evolution, Impact, Reform, Routledge.
- United Nations (2022) The SDG Partnership Guidebook: A Practical Guide to Building High Impact Multi-stakeholder Partnerships for the Sustainable Development Goals, United Nations.

GPO4105

Period 4

3 Feb 2025

28 Feb 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• T. Skripka

Teaching methods:

Assignment(s), Coaching, Paper(s), Skills, Work in subgroups, Working visit(s)

Assessment methods:

Participation, Assessment, Presentation and paper, Final paper

Keywords:

Global governance; Human development; International organizations; Participation; International negotiations

Maastricht Graduate School of Governance

The Law and Policy of the World Trade Organization

Full course description

The second course of the specialization Global Governance for Development offers an introduction to the fundamental normative pillars of the multilateral framework for international trade. It focuses on the World Trade Organization (WTO) as the key multilateral organization establishing the norms and rules for trade relations around the globe.

There is a broad consensus among economists and policymakers that economic globalisation in general, and international trade in particular, may offer an unprecedented opportunity to eradicate poverty and hunger worldwide. However, to ensure that this opportunity is realised, economic globalisation and international trade have to be managed and regulated at the international level. If not, economic globalisation and international trade are likely to become a curse rather than a blessing to humankind, aggravating economic inequality, social injustice, environmental degradation and cultural dispossession. The World Trade Organization and its law are at the heart of the international community's current efforts at managing and regulating economic globalisation and international trade.

This course introduces the institutional and substantive law of the World Trade Organization, based on discussion of true-to-life case studies. In doing so, it provides students with an understanding of the implications of this legal framework for the ability of governments to pursue their societal policy objectives, such as economic development and sustainability.

This four-week course addresses three main topics:

Week one covers institutional issues and dispute settlement in the WTO. It starts by introducing students to the phenomenon of economic globalisation, the role of law in international economic and trade relations and the history, objectives, structure, functions, decision-making and membership of the WTO. We then move on to examining the WTO dispute settlement system, discussing the principles, procedures and institutions of this system, and its current crisis.

In week two, we turn to the core substantive rules that govern trade relations between WTO Members, namely the rules on non-discrimination for trade in goods and trade in services (known as the obligations of most-favoured nation treatment and national treatment) and the WTO rules on market access (which deal with tariff barriers and non-tariff barriers to trade in goods and services).

In week three, we discuss the exceptions to WTO rules that allow WTO Members to balance free trade with other societal values and interests (such as general public policy objectives, national security objectives and economic policy objectives).

Week four brings all these aspects of WTO law together in a simulation exercise, where students take on the roles of disputing parties in a case brought to the WTO, and use the legal framework discussed in the course to build convincing arguments for the party they represent. This exercise aims to ensure that students understand the policy implications of the WTO legal framework as a whole and can build convincing arguments in this regard. A workshop on moot court simulations is provided to help students acquire the skills of preparing and presenting a country's position in a simulated trade dispute.

Aside from interactive lectures on the above topics to ensure a firm theoretical understanding of the WTO as an institution and its main rules, the course aims to ensure that students develop a practical

understanding of the application of these rules and their effect on states' policy making, including on the possibilities to promote sustainable development. To this end, the course is built around a number of true-to-life international trade problems set out in tutorial assignments on each topic, involving a fictitious developing-country Member of the WTO. Students are expected to solve these trade problems by applying their understanding of WTO rules to the fictional cases both in the form of papers and through active oral participation in tutorial classes. They will thereby learn how to use the WTO legal framework to resolve practical issues that arise in international trade relations, and how to write briefs setting out their conclusions.

Weekly 'sticky idea presentations' by groups of students ensure that students are aware of and can engage in discussion of topical issues of relevance to the course. These presentations are based on the critical literature and readings on current developments assigned for each topic. They aim to ensure that students engage actively with these materials, deepen their understanding and develop their skills in presenting core ideas in an effective manner.

Course objectives

This course aims to provide students with an overview of the institutional structure and main substantive rules of the World Trade Organization. After this course, students should:

- Understand the role of law in governing international trade, be familiar with the institutional arrangements and core rules of the WTO, and grasp the key challenges facing the organization in light of current developments.
- Be able to apply the legal framework of the WTO to analyse real-world trade problems.
- Evaluate and critically assess the implications of the WTO legal framework for the regulatory autonomy of governments to pursue their non-trade objectives, including in the area of sustainable development.
- Use the WTO legal framework to develop convincing arguments and formulate a well-motivated position for a WTO Member.

Prerequisites

None

Recommended reading

- Mandatory: Van den Bossche, P. & Prevost, D. Essentials of WTO Law, 2nd ed. Cambridge University Press 2021; or
- Recommended: Van den Bossche. P & Zdouc, W., The Law and Policy of the World Trade Organization. 5th ed. Cambridge University Press 2021;
- The WTO Agreements. The Marrakesh Agreement establishing the World Trade Organization and its Annexes (Cambridge University Press, 2017); or
- printouts of the WTO agreements, available from: https://www.wto.org/english/docs_e/legal_e/legal_e.htm
- Scholarly papers/articles/news items listed on Canvas.

GTD4206 Period 4 10 Mar 2025 4 Apr 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• M.D. Prévost

Teaching methods:

Presentation(s), Paper(s), Work in subgroups, Assignment(s), Lecture(s), PBL, Skills

Assessment methods:

Written exam, Presentation and paper

Keywords:

World Trade Organization, international trade law; trade policy-making; economic globalisation Maastricht Graduate School of Governance

Peacebuilding and Development

Full course description

The third course of the specialization of Global Governance for Development introduces the mechanisms and instruments developed by International Organizations with regional, state-level, and local actors to establish peace conditions for development. Throughout the course we examine violent conflicts from an institutional, governance and development perspective.

Conflicts and violence are the main barrier for development. The first week focuses on onsets and development consequences of conflicts. We explore various causes of wars through the political perspectives. We also use case studies to explore how a conflict trap is formed and sustained. Tutorials will introduce the systems approach to map different actors and structural conditions to address the complexity of war. GIS will be used to teach students the basics of spatial data visualisation and conduct elementary spatial analysis.

The next two weeks focus on UN peacebuilding paradigms driving international efforts of conflict resolution and peacekeeping. We look at the legal foundation of UN peacekeeping operations and its evolution. We also examine how peacekeeping operations and other instruments contribute to the reduction and termination of violent conflicts. Students will learn how to build a policy assessment framework to evaluate the success of a peacekeeping operation. Students will also learn how to conduct qualitative comparative analysis (QCA) to identify conditions that lead to the success and failure of peacekeeping using the programme language R.

Throughout the course, students will acquire various skills and tools for policy and academic research.

Course objectives

By the end of the course, students should be able to:

- explain the global governance of the interdependencies between conflicts, development, and sustainable peace;
- list and evaluate policy options and partnerships that are available to actors to resolve a

conflict:

- use GIS to visualise spatial patterns for descriptive analyses and /or to test a hypothesis related to peacebuilding and development;
- build a policy assessment framework for policy evaluation in the case of peacebuilding and development.

Prerequisites

There are no specific requirements for this course.

Recommended reading

Reader

GPO4307 Period 5 14 Apr 2025 9 May 2025 Print course description ECTS credits:

Instruction language:

English

Coordinator:

• P.H. Wong

Teaching methods: Lecture(s), PBL, Work in subgroups Assessment methods: Presentation and paper, Participation

Keywords:

Causes of Wars; Development; Conflict Resolution; Peacekeeping; Transitional Justice; GIS Maastricht Graduate School of Governance

Global Governance of Planetary Challenges

Full course description

Development has detrimental effects on the natural conditions for human development around the globe. Therefore, the fourth course of specialisation, Global Governance of Development, will scrutinise the governance of partnerships launched by different International Organizations with regional, state, and local actors to address contemporary energy and climate development challenges.

We live in the era of the Anthropocene, in which humans have a profound impact on Earth. During this period of expansive industrialisation propelled by fossil fuels, humans altered dangerously and unpredictably planetary conditions and processes on which human societies depend. The deterioration of ecological conditions endangers the accomplishment of SDGs.

This course introduces the global governance institutions addressing Anthropocene challenges at the crossroads of climate change and energy transitions. During this course, students will acquire essential knowledge, analytical tools and professional skills related to the governance of Anthropocene challenges in partnerships with global, regional, national, and local actors. Planetary challenges of the Anthropocene era reflect global systemic connections and interdependencies between human activities and ecosystems. During this course, we will try to answer how planetary challenges are defined. Who has the authority to govern them in global international institutions? What are the solutions proposed, and how are they implemented? Therefore, we will study global political aspects of controversies surrounding climate and energy and their societal consequences around the globe. In this way, we will also link governance with challenges with prospects of accomplishing SDGs. Therefore, we will also introduce project management tools allowing the design of practical solutions to some aspects of planetary challenges meeting SDGs ambitions in local partnership.

During the lectures, we will introduce the essential features of the Anthropocene and the earth systems governance from the analytical perspective of Complex Social Systems and Global Regimes Complex. Using these analytical perspectives, students will understand the complexity of global environmental, climate and energy policies as an evolving system of overlapping and complementary institutions, organisations, and regimes. We will focus on the challenges and solutions related to human dependency on energy resources and how international regimes promote the transition from fossil fuels to renewable energy sources. Furthermore, we will analyse international institutions and actors involved in the global governance of climate change challenges and focus on the interplay between global commitments and state processes. To understand the complexity of global planetary challenges and pathways to address them, we will simulate the developmental interdependencies through the En-ROADS-Climate Action Simulation model.

After the introductory workshop on project management in International Organizations, during tutorials, we will also initiate the assemblage of a project proposal contributing to tackling climate change challenges by defining the problem we want to tackle. We will continue our project design trajectory during the following two tutorials and focus on relevant stakeholders and project objectives. After the introductory workshop, we will develop the theory of change and a plan for problem-solving actions during two tutorials and learn how to conceptualise and measure appropriate indicators. We will also learn about various tools (briefs, blogs, podcasts) to disseminate our proposed project solutions and policy recommendations.

Finally, during this course, we will discover practical examples of dealing with regional, national, and local planetary challenges. We will meet practitioners from international institutions to learn about their everyday work of policy design, implementation, and evaluation.

Course objectives

After completing this course, students should be able to:

- Define and discuss the role of global governance institutions in tackling climate and energy challenges and accomplishing Sustainable Development Goals.
- Identify and apply an appropriate analytical approach and research methods to analyse the complexity of the governance of planetary challenges in specific case studies.
- Design a project-based solution to a real-life societal problem emerging from the climateenergy-environmental nexus and justify its contribution to accomplishing SDGs.

Prerequisites

None

Recommended reading

Reader with selected readings and handbooks:

- Biermann, Frank and Rakhyun Kim (eds.) (2020) Architectures of earth system governance: institutional complexity and structural transformation, Cambridge: Cambridge University Press.
- Chasek, Pamela S. and David L. Downie, Janet Welsh Brown (2018) Global Environmental Politics. London and New York: Routledge.
- Harris, Paul G. (ed), (2014) Routledge Handbook of Global Environmental Politics. London and New York: Routledge.
- Morin, Jean-Frédéric, Amandine Orsini, and Sikina Jinnah (2021), Global Environmental Politics. Understanding the Governance of the Earth. Oxford: Oxford University Press.
- Stevenson, Hayley (2018) Global Environmental Politics. Problems, Policy and Practice, Cambridge: Cambridge University Press.
- Van de Graaf, T., Sovacool, B.K. (2020). Global Energy Politics. Cambridge: Polity.

GPO4408
Period 5
12 May 2025
6 Jun 2025
Print course description
ECTS credits:
4.0

Instruction language:

English

Coordinator:

• M.K. Natorski

Teaching methods:
PBL, Lecture(s), Training(s)
Assessment methods:
Portfolio, Participation, Final paper
Keywords:

Anthropocene, global governance, climate change, energy transitions

Specialisation Governance of Innovation

Maastricht Graduate School of Governance

Innovation and Innovation Policy From A System Perspective

Full course description

Innovation plays a crucial role in promoting economic growth and how we understand and address

Master Public Policy and Human Development global challenges relating to the Sustainable Development Goals (SDGs).

This course offers an overview of what innovation is and why it is important in various contexts and seeks to address key questions: who are the relevant actors involved in the innovation process? How can innovation contribute to socio-economic development? How can we guide policymakers globally to design, monitor and evaluate policy interventions aimed to enhance productivity, sustainable growth or social or environmental goals, depending on the specific objectives or given scope?

In the first week, students will be introduced to the fundamentals of innovation. They will be exposed to the key concepts to identify and describe the innovation characteristics: types of innovation (product and process), the impact of innovation (radical and incremental), sources of innovation (technological and non-technological), as well as bottlenecks and hampering factors. Students will develop knowledge of the 'innovation systems' approach and gain insights into the many and varied interactions between, and the roles of, different actors, institutions and contexts. The second week will be dedicated to analysing cases where the market has failed to match incentives to the value of the innovation activity. This includes the problem of appropriability and the degree to which the returns from investment accrue to the innovator or to other market participants. Students will also learn about enhancing capability and catching up, innovation from a firm perspective, the role of the Intellectual Property Right (IPR), and open innovation.

The third week will focus on innovation indicators and innovation scoreboards. You will explore the challenging question of how to observe and measure innovation at the firm, industry and country levels. The objective is to familiarise students with tools and approaches such as innovation surveys, and to measure and interpret the appropriate quantitative indicators measuring innovation inputs and outputs.

The fourth week will consider global perspectives and students will reflect on the question: how does one country achieve rapid economic growth while others cannot? We will examine opportunities opened up by globalisation and the rise of emerging economies.

Throughout the course leading innovation and development experts will deliver guest lectures to establish credible connections between the material covered and their application including in the context of international organizations.

Course objectives

- Understand the nature of innovation; types of innovation, impact and source of innovation.
- Analyse new and emerging issues and types of innovation, e.g. social innovation, innovation for inclusive development, and public sector innovation.
- Access the systemic nature of innovation systems, identifying actors of the system and their roles
- Debate the incentives to innovate
- Analyse the rationale behind innovation policy
- Evaluate relevant policy instruments related to innovation.

As additional skills, students will acquire hands-on knowledge on a broad range of quantitative indicators to measure innovation performance (firm, industry, country) and learn how to apply them critically. You will also learn how to effectively debate policy-relevant issues.

Prerequisites

None

Recommended reading

• Greenhalgh, C., & Rogers, M. (2010). Innovation, intellectual property, and economic growth. Princeton University Press.,

GID4105
Period 4
3 Feb 2025
28 Feb 2025
Print course description
ECTS credits:
4.0
Coordinator:

• F. Visentin

Teaching methods:
Lecture(s), PBL, Presentations, Skills
Assessment methods:
Participation, Presentation and paper, Oral exam
Keywords:
Innovation; Market failures; Indicators; Innovation Systems; Innovation policy
Maastricht Graduate School of Governance

Local Knowledge, Systems and Policy

Full course description

Local economic systems do not innovate in the same way. They do not react and contribute in the same way to global challenges, technological change and globalisation. Within cities, industries, clusters and regions, technical change and innovation is governed through the interactions of various agents with different capabilities (e.g. individuals, firms, universities, policy makers, institutions). To understand innovation and innovation policy, we must understand how these various agents (as producers and users of knowledge) interact and develop their capabilities. New ideas about knowledge imply that knowledge transfer is not as easy as was once thought. The diffusion of a new idea or capability is a complex process. Not all knowledge can be codified, and the noncodified knowledge, which is by nature difficult to transmit, is extremely important for both innovation and diffusion. This implies that much knowledge creation and diffusion is geographically localised and policy must take this into account.

In the first week of this course, students will review local system approaches and examine how new ideas about knowledge and innovation affect our understanding of the processes of innovation and of innovation policy. The focus is on the systemic features of innovation and how they play out in a local context. In the second week, we concentrate on taxonomies of innovation and knowledge flows. In some regions knowledge transmission across buyer-supplier links in value-chains are central, in other, science-based systems, innovation builds on scientific advances in university research. In some regions knowledge creation is key, in others knowledge absorption or adoption is central to the

region's progress. Some regions are dominated by high tech, others by low tech, but innovation occurs in both. These axes all enter any taxonomy of regional innovation. One specific question we address is the role of universities in local development. Universities can be a source of novel knowledge and innovation, or a source of highly skilled labour. The role a university plays depends on what kind of local innovation is driving the region. In the third week, we concentrate on policies that attempt to build strong links among local agents in innovation chains or value chains (e.g. cluster policies, smart specialisation). For example, concerns about creating a critical mass of knowledge workers have led many regions to create "science parks", or "technopoles", hoping to generate new industries, or to become the next Silicon Valley. But less dramatic policies also exist. In the fourth week, we analyse the contents of successful policy. The main policy issue is how to create interactions among local knowledge actors that contribute to the performance of local economies. What can we learn from success stories from different local systems? For example, Italian industrial districts have often been considered paradoxical: small, relatively isolated regions in Italy, apparently poorly connected to the outside world, but they are world leaders in their fields. How does this happen, and could it be reproduced? Will smart cities be the new locus and focus of specialisation and growth? Has globalisation removed local effects or can local policy makers still influence their economies?

This course overall looks at how local agents interact in the innovation ecosystem. The goal is to analyse and understand how these local interactions and interventions contribute to the performance of the local economies, and to prepare policy recommendations for specific regional development strategies.

Course objectives

- Describe in detail the factors that feature in a local or regional innovation system;
- Understand policy considerations relevant to regional policy-makers.
- Be familiar with policy measures both actual and potential aimed at nurturing a regional innovation system;
- Understand the roles of different actors in the system.
- Generate ideas relevant to innovation policy design and improvement.
- Be comfortable with basic social network analysis using R and igraph software.

Prerequisites

None

Recommended reading

Course reader.

GID4206
Period 4
10 Mar 2025
4 Apr 2025
Print course description
ECTS credits:
4.0
Instruction language:
English

Master Public Policy and Human Development Coordinator:

• R. Cowan

Teaching methods:

Lecture(s), PBL, Skills, Presentation(s), Assignment(s)

Assessment methods:

Presentation and paper, Assignment, Participation

Keywords:

knowledge, Innovation, Regions, Networks, diffusion, Smart Specialisation, Smart Cities, Metrics and Indicators, Smart Growth

Maastricht Graduate School of Governance

Managing the Fourth Industrial Revolution

Full course description

New technologies associated with the Fourth Industrial Revolution hold out great promise in helping to achieve the Sustainable Development Goals (SDGs) by generating rapid, equitable and sustainable economic growth, by aiding the fight against climate change, and by improving health and education outcomes across the world. In equal measure, the development of this broad set of technologies - including 3D printing, nanotechnology, the internet of things, artificial intelligence and robotics, biotechnologies, neurotechnologies, virtual reality, energy capture, and blockchain - raises many economic, societal and ethical concerns. Concerns abound as to whether developing countries will be excluded from sharing the benefits of these technologies, for example, by limiting opportunities to develop through Global Value Chains, and to whether new technologies - and robotisation and artificial intelligence in particular - will deprive millions of their jobs, exacerbating inequality both within and across countries. Risks from big data also play a prominent role in the current debate. With the application of digitalisation technologies, many activities related to business and social lives can be captured and analysed and may lead to legal or political challenges. These developments suggest that attempts to maximise the benefits of these new technologies while minimising the social costs will involve a coordinated policy response.

This course identifies the opportunities and threats associated with emerging technologies and considers the appropriate policy responses to these new technologies. Week 1 will introduce the concept of the Fourth Industrial Revolution, identify the opportunities and threats from the associated new technologies, and discuss the emerging evidence on their impacts. In Week 2, the course will provide skill development sessions and discuss employment issues related to the emergence of new technologies. The first skill development lecture will demonstrate the collection and use of big data, and offer a general view on managing megadata in analysing science, technology and innovations. Week 3 continues with skill development lectures and also focusses on the dark side of innovation, discussing the "unintended" negative effects of new technologies and the risks and concerns of big data. The second and third skills development lectures will introduce machine learning and provide an overview of methods from natural language processing. Finally, in Week 4 the course concentrates on forward-looking strategies. We will look at different policies in both developed and developing countries and explore how countries find their own strategies towards coping with the challenges imposed by the Fourth Industrial Revolution.

Course objectives

- Explain what is meant by the Fourth Industrial Revolution, the technologies that are involved and the potential opportunities and threats that these technologies have on society and development opportunities
- Develop skills of detecting and assessing emerging technologies (e.g. MySQL skills for exploring patent databases)
- Acquire knowledge on machine learning techniques
- Identify the set of policies that are relevant to encourage the appropriate development of new technologies
- Understand the impact of digitalisation on the economy and society
- Explain the role of policy as a development tool in the context of emerging technologies
- Identify the potential negative consequences to society and to individuals of emerging technologies and identify appropriate policy responses to mitigate these consequences

Prerequisites

None

Recommended reading

Course reader

GID4307

Period 5

14 Apr 2025

9 May 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• L. Wang

Teaching methods:

Assignment(s), Paper(s), Research, Skills, Work in subgroups

Assessment methods:

Written exam, Assessment, Final paper, Final take home exam, Presentation and paper, Take home exam, Participation

Keywords:

Fourth Industrial Revolution; Emerging technologies; Innovation policy; Labour markets; Risks of big data; Machine learning

Maastricht Graduate School of Governance

Innovation for Sustainability

Full course description

For meeting the target of limiting global warming to 1.5oC and reducing air pollution, we need innovations and transitions in energy and mobility, whereas for reducing (unsustainable) resource use and waste volumes, we need to close material loops (e.g. transition to a circular economy). Achieving those systemic transitions is difficult because of sunk costs advantages of existing technologies, infrastructure needs of new technologies, emerging innovations, institutional rigidities, resistance from incumbents and entrenched practices. In this context, this course looks at the role of innovation for achieving a sustainable economy, with special attention to barriers, elements and drivers of transformation and the role of public policy from a multi-level perspective.

During Week 1, the course examines the notion of innovation for sustainability, the circular economy as a transformative challenge for society, government and business, and two successful transitions: hygienic sanitation and the shift to recycling and waste incineration (through policies to divert waste from landfilling). Week 2 consists of lectures and readings on coordinating technological innovation systems, green industrial policy and the challenge of creating sustainable solutions in developing countries. In Week 3, the course looks at different perspectives on climate policy and the topic of an alternative economy, through a critical investigation of the global market economy and two alternatives for it: Kate Raworth's Doughnut economics model and Christian Felber's Economy for the Common Good.

The course will involve a group assignment – a paper about an eco-innovation, for which students should describe the following:

- the producers and prospective users;

the history of system-building activities;

the social and environmental sustainability advantages (compared to relevant alternatives);

the role of policy (with special attention to the interaction effects of policy mixes, whether they work in tandem or against each other, evidence of bad policies which are unnecessary or highly inefficient);

the degree of supply chain change, organisational change, and social innovation; and

the relevant institutional change needed for wider diffusion.

This task will be done in groups of three to four students. There will be two outputs: the paper (of around 3000 words) and a 15-minute PowerPoint presentation, to be presented by one or two of the students.

A hands-on skills development component is part of the course. This will take the form of a workshop on set theoretical comparative analysis and Q-methodology analysis in the field of innovation for sustainability.

Course objectives

- Explain why innovation is important for the economy and the SDGs.
- Describe the sources of the carbon lock-in and the lock-in to the take, make and waste paradigm.
- Assist policymakers to design better policies to support eco-innovation and a circular economy.
- Study the dynamics of specific eco-innovations and the need for new business models and

Master Public Policy and Human Development alignment of multiple activities and strategies.

Prerequisites

None

Recommended reading

Course reader.

GID4408 Period 5 12 May 2025 6 Jun 2025 Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• S. Turkeli

Teaching methods:

Assignment(s), Paper(s), Research, Skills, Work in subgroups, Presentations

Assessment methods:

Presentation and paper, Participation, Oral exam

Keywords:

Innovation, Sustainability, lock-in, transition, circular economy

Specialisation Risk and Vulnerability

Maastricht Graduate School of Governance

Risk and Vulnerability Assessment

Full course description

This course serves as a general introductory course to the Risk and Vulnerability Specialisation. Students will be introduced to key concepts, frameworks and empirical methods to assess risk and vulnerability in the context of climate change and natural hazards. A major part of the course is dedicated to introducing students to GIS-based (Geographical Information Systems) methods for vulnerability and risk mapping through hands-on GIS-based workshops using geospatial data.

Course objectives

- Comprehend and interpret key definitions and conceptual frameworks related to risk and vulnerability and its assessment,
- conduct GIS-based data analysis

- Analyse hazardous and vulnerable situations using both GIS techniques and conceptual frameworks
- Connect vulnerability and risk assessment to policy developments and international agreements
- Prepare a GIS- based risk map for individual case studies
- Complete a well-structured report with proper references and critical analysis

Prerequisites

None

Recommended reading

· Course reader

RSK4105 Period 4 3 Feb 2025 28 Feb 2025 Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinators:

- Valerie Graw
- Davide Cotti
- Eleonora Nillesen
- E.E.M. Nillesen

Teaching methods:

Lecture(s), Presentation(s), Assignment(s), Work in subgroups

Assessment methods:

Final paper

Keywords:

Disaster risk assessment and mapping; key concepts, theories and frameworks related to disaster risks, vulnerability and resilience; multi-scale vulnerability and risk assessment at different levels; climate change and the global development agenda, geoprocessing for risk mapping and analysis Maastricht Graduate School of Governance

Building Resilience and Adaptive Governance

Full course description

The ability to identify and assess conditions at risk is not necessarily sufficient to avoid crises and disasters. As such, building resilience and promoting adaptive governance are key issues in the international discourse on how to respond to the increasing frequency and magnitude of geophysical risks, disease epidemics, violent conflict, and extreme meteorological events. Earth observation data plays a crucial role in the monitoring of a disaster as well as during the emergency response

cycle. In this course, students will learn about key concepts, theories and approaches in resilience building and adaptive governance. Based on the knowledge gained in RSK4105 on how to assess risk, this course will apply the concepts and options to manage different types of risks that contribute to building resilience. In the second part of the course students will learn how disaster risk can be monitored using earth observation data, and how such data can support disaster risk reduction across scale. Students will also learn how disaster monitoring can be linked to management strategies related to the Global Development Agenda, including the SDGs and the global planetary boundaries.

Course objectives

- Understand and apply relevant concepts and theories related to resilience and adaptive governance
- Understand the role of governance in contributing to reducing risk and adapting to climate change, including by coherence building
- Understand the range of risk management approaches, including specific local-level solutions and related opportunities and limitations
- Learn basic concepts of optical and radar remote sensing
- Work with Earth Observation (EO) data to conduct disaster risk monitoring with open source software and cloud-based platforms
- Understand the opportunities and challenges of EO for disaster risk monitoring and management

Prerequisites

None

Recommended reading

Course reader

RSK4206

Period 4

10 Mar 2025

4 Apr 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinators:

- Valerie Graw
- Dominic Sett
- Eleonora Nillesen
- E.E.M. Nillesen

Teaching methods:

Paper(s), Research, Skills, Lecture(s), Work in subgroups, Presentation(s)

Assessment methods:

Final paper

Keywords:

Disaster risk monitoring; Disaster risk reduction and behavioural response; Resilience building; Reconstruction and recovery; Adaptive governance; Climate change adaptation.

Maastricht Graduate School of Governance

Risk Management in Crisis Situations

Full course description

What happens when crises and disasters materialise? What can be done to manage crises better? How can underlying trade-offs in crises management be identified and managed? Does regulation matter? Key variables such as perceptions, feelings, trust, and social amplification through, for example media and social media have been shown to affect individual beliefs and attitudes in the face of risky events. During this module, students will discuss these and other aspects of risk management while capitalising on social-scientific knowledge and analysis of crisis situations and will consider contemporary and post-trust societies as well as risks related to geophysical disasters, health, conflict, and cyber security.

Course objectives

- Identify different crises management methods and tools
- Explain the role of social and social media networks in shaping beliefs and attitudes related to risk management and the effect on policy responses
- Evaluate present-day crises management using cost-benefit and cost-effectiveness analysis

Prerequisites

None

Recommended reading

- Risk management in post-trust societies, Earthscan (Löfstedt, 2005).
- The Politics of Precaution. Regulating Health Safety and Environmental Risks in Europe and the United States. Princeton and Oxford: Princeton University Press (Vogel, 2012).

RSK4307
Period 5
14 Apr 2025
9 May 2025
Print course description
ECTS credits:
4.0
Instruction language:

English

Coordinators:

- F.E. Bouder
- E.E.M. Nillesen

Teaching methods:

Assignment(s), Lecture(s), Presentation(s)

Assessment methods:

Presentation and paper

Keywords:

Acute hazardous events; Precautionary crises management; Crises regulation; Cost-benefit/Cost-effective analysis; Innovations in crisis management.

Maastricht Graduate School of Governance

Behavioral Insights for Policy Design in Risky and Vulnerable Situations

Full course description

The final course of the specialisation will put the concepts of risk, vulnerability, and risk management in a broader perspective. Risks are always to some extent "human-made" in terms of perceptions of facts and with relations between facts, and are thus subject to psychological and social dynamics. The extent to which possible future events are recognised, perceived, and labelled as risks, and the way they are framed, explained, and consequently managed depend on an interplay of social and psychological processes. This helps to explain the wide divergence in perceptions about what is, in essence, the same objective risk, as in the case of vaccinations, for example. By presenting relevant insights from the sociology, psychology, and economics of risk, this course intends to deepen students' understanding of risk as a social-behavioural phenomenon, and consequently increase the options for effective risk management.

Course objectives

- Introduce key concepts, insights and perspectives from the sociology, psychology and economics of risk
- Apply concepts, insights and perspectives to a specific given risk.
- Develop skills for recognising and communicating relevant insights from academic research to policymakers in the area of risk.

Prerequisites

None

Recommended reading

Course reader

RSK4409 Period 5 12 May 2025 6 Jun 2025 Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinators:

- R. Weehuizen
- E.E.M. Nillesen

Teaching methods:

Assignment(s), Lecture(s), Presentation(s), Work in subgroups

Assessment methods:

Participation, Written exam, Presentation

Keywords:

behavioural economics, social psychology, policy design, communication skills

Specialisation Social Protection Policy

Maastricht Graduate School of Governance

The Global Social Challenge: Beyond Poverty & Inequality

Full course description

The evidence of mounting world poverty and inequality is compelling. The challenge globally is to move beyond sheer descriptions and consider holistic frameworks that can give poor and vulnerable populations sustainable access to the resources they need to be self-sufficient and to be able to contribute in their societies. There is a common perception that it is primarily developing countries which experience severe poverty and inequality but the problem also extends to developed and industrialised countries. This course presents students with a wide range of concepts, definitions, and theories of poverty and inequality. The main objective is to increase knowledge and understanding of the diversity and complexity of poverty and inequality, their forms and root causes and the linkages between the concepts of human development and the welfare state. Students will learn the basic technical skills required to measure poverty and inequality and consider a range of other topics including: social risks and vulnerability, patterns of economic and social development, sources of inequality, formal and informal labour markets, social impacts of growth, macro-economic (fiscal, monetary) policy, global governance, and the role of international institutions and their role in development.

Course objectives

- Explain the translation of theory into conceptual and measurement options for poverty, inequality, and vulnerability.
- Justify the selection of poverty and inequality measures within a given context, which requires:
 - Defining, comparing, and applying ways of understanding poverty measurements (unidimensional and multidimensional)
 - Examining, justifying, and applying different simple methods of measuring inequality.
- Identify and explain more complex inequality and mobility measurement methods
- Explain the relationship between historical patterns of poverty, inequality and the welfare state

• Appraise, negotiate, advocate, and recommend policy options relating to poverty reduction strategies for duty bearers.

Prerequisites

None

Recommended reading

- Deneulin, S., & Shahani, L. (2009). An introduction to the human development and capability approach: Freedom and agency. Earthscan.
- Haughton, J., & Khandker, S. R. (2009). Handbook on Poverty and Inequality. Washington D.C.: World Bank Publications.
- Course Reader

SPP4205

Period 4

3 Feb 2025

28 Feb 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• Z. Nimeh

Teaching methods:

Assignment(s), Lecture(s), PBL, Presentation(s), Paper(s), Research, Skills, Work in subgroups Assessment methods:

Participation, Attendance, Presentation and paper, Final paper

Keywords:

poverty, inequality, Human Development, social justice

Maastricht Graduate School of Governance

Understanding Social Protection: From Justification to Intervention

Full course description

This course offers a comprehensive introduction to social protection policy and design. It provides an overview of the development of the main issues, theories, and practices regarding the design and the implementation of social protection policies and social safety nets in advanced economies, and contrasts them to emerging and developing economies. The course aims to equip students with the knowledge that is needed to identify the range of policy options to address the global social challenges for developed and developing economies.

During the course, a variety of social protection frameworks and contexts will be explored. The course will build on a discussion of the welfare state, while providing an in-depth overview of the

range of state interventions (including types of benefits and interventions such as social assistance, universal benefit schemes, social insurance schemes, mandated private insurance, the new generation of conditional, and unconditional cash transfers). It will discuss the economic effects of welfare interventions, the political economy of government interventions, potential effects of benefits on poverty, and income distributions (static micro analytical practice) and stakeholder interest analysis. A range of examples will be offered on different levels of state interventions.

Course objectives

- Explain and examine the principles and frameworks of social protection and the different instruments and their design;
 - Contrast the contexts between developing countries (Risk Coping: Non-Contributory...) and developed countries (Risk Mitigation: Pensions and social insurance...)
- Justify the selection of different interventions and instruments based on actual contexts
- Understand the purpose of ex-post and ex-ante analysis, the difference between them, and how they can be applied to assess the state of social protection in a given context.
- Appraise, negotiate, advocate, and recommend policy options relating to social protection systems in a given context while linking with a Poverty and Inequality Profile of that context.

Prerequisites

SP4205 Highly Recommended

Attending the offered skills premier in microsimulation prior to the beginning of the specialisation is recommended.

Recommended reading

- M. E., Del Ninno, C., Tesliuc, E. D., & Ouerghi, A. (2008). For protection and promotion: The design and implementation of effective safety nets. World Bank.
- Course reader

SPP4206

Period 4

10 Mar 2025

4 Apr 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• Z. Nimeh

Teaching methods:

Assignment(s), Lecture(s), PBL, Presentation(s), Paper(s)

Assessment methods:

Attendance, Final paper, Participation, Presentation and paper

Keywords:

Social Protection Policy; Welfare State; Safety Nets; Political Economy; Policy Microsimulation

Quantitative Techniques for Social Protection Policy Design

Full course description

National social protection systems are designed to provide income as well as health security in times of need and to prevent people from falling into poverty. Many countries redistribute – through tax and contribution collections and benefit payments – significant portions of the national economy, usually expressed in terms of gross domestic product (GDP). Efficient governance supported by sound quantitative studies can make a lasting difference in people's lives. Quantitative specialists working for social protection systems must anticipate future uncertainties and complex interrelations between different systems. Effective quantitative analyses of current and projected social protection systems support policy decisions on the design and monitoring of social protection systems. This course will develop students' understanding of advanced quantitative studies and the actuarial modelling required for the sound financial governance of social protection systems, including social insurance pensions. Essentially, it will provide the knowledge and modelling tools needed for the effective design, management, and monitoring of national social protection systems.

Course objectives

- Increase technical knowledge and expertise on social protection financing methods and actuarial modelling needed for the effective design, management, and monitoring of social protection systems
- Learn how modelling can be used to project future social protection expenditure and revenues.
- Utilize knowledge on actuarial methodologies and models.
- Better understand the financial planning of social protection systems.

Prerequisites

None

Prior knowledge of Excel is highly recommended

Recommended reading

- Plamondon, P., Drouin, A., Binet, G., Cichon, M., McGillivray, W., Bédard, M., Perez M. & Hernando (2002). Actuarial Practice in Social Security. Geneva: ILO/ISSA, Part IV, chapters. 7.4, 8, 10, 11
- ILO (2021). World Social Protection Report 2020-22: Social protection at the crossroads in pursuit of a better future. Geneva.
- ISSA, ILO (2016). ISSA-ILO Guidelines on Actuarial Work for Social Security. Chapter 1. ISS/ILO.

SPP4408
Period 5
14 Apr 2025
9 May 2025
Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinators:

- F. Gassmann
- Z. Nimeh

Teaching methods:

Assignment(s), Skills, Presentations, Work in subgroups, PBL

Assessment methods:

Attendance, Assessment, Presentation

Keywords:

National Accounts; Social Protection; Pensions Maastricht Graduate School of Governance

Financing Social Protection

Full course description

Financing Social Protection is the fourth and concluding course of the specialisation, bringing together the issues that were covered by the previous three courses. It seeks to strike a balance between the introduction of concepts of social protection financing and the reinforcement of technical skills that every policy analyst in social protection should be familiar with and be able to use. The course also builds on the concepts of poverty, inequality, social justice, social development and the need for social protection, the range of social protection interventions and their rationale, as well as the range of existing quantitative costing techniques and impact analysis that were introduced in the preceding courses.

In any society, social transfers account for a substantial part of national income. Large-scale distributive mechanisms should be designed and operated with the utmost care to optimise social, economic, and fiscal outcomes. How should social protection be financed? Should a given new benefit be funded by taxes, contributions or private payments? Who pays for what in social protection systems? What would be the likely effect of a new scheme or a new benefit on economic performance, the government's budget, other benefits in the system and income distribution? How can financial management and governance be organised in a way that makes the best use of scarce resources? This course, in line with the previous courses, seeks to provide future financial planners and decision-makers with the tools for good financial, fiscal, and economic governance of national social protection systems.

Course objectives

- Understand the intricate financial linkages between the government budget and the social protection system.
- Conduct a fiscal space analysis for social protection programmes.
- Assess scheme performance, including integration, design, and delivery.
- Understand the complexities involved in the design and implementation of social protection programmes and policies.
- Examine and review the political economy souring social protection programmes.

Prerequisites

None

Prior knowledge of Excel is highly recommended

Recommended reading

- Van de Meerendonk, A. (2021). Financing Social Protection in: Loewe and Schüring (eds). Handbook of Social Protection. Bonn.
- Fischer, A. M. (2017). Dilemmas of externally financing domestic expenditures: Rethinking the political economy of aid and social protection through the monetary transformation dilemma (No. 629). ISS Working Paper Series / General Series (Vol. 629, pp. 1-41). International Institute of Social Studies of Erasmus University (ISS).
- Pritchett, L. (2005). A lecture on the political economy of targeted safety nets. Social protection discussion paper series No. 0501. Washington, DC: World Bank.
- Reader

SPF4105 Period 5 12 May 2025 6 Jun 2025 Print course description ECTS credits: 4.0

Instruction language:

English

Coordinators:

- F. Gassmann
- Z. Nimeh

Teaching methods:

PBL, Lecture(s), Assignment(s), Paper(s), Skills, Work in subgroups

Assessment methods:

Assignment, Attendance, Presentation

Kevwords:

Social Expenditure; Fiscal Space; Financing Mechanisms; Taxes; Political Economy; Governance

Specialisation Governance of Innovation

Maastricht Graduate School of Governance

Local Knowledge, Systems and Policy

Full course description

Local economic systems do not innovate in the same way. They do not react and contribute in the same way to global challenges, technological change and globalisation. Within cities, industries, clusters and regions, technical change and innovation is governed through the interactions of various agents with different capabilities (e.g. individuals, firms, universities, policy makers, institutions). To understand innovation and innovation policy, we must understand how these various agents (as producers and users of knowledge) interact and develop their capabilities. New ideas about knowledge imply that knowledge transfer is not as easy as was once thought. The diffusion of a new idea or capability is a complex process. Not all knowledge can be codified, and the noncodified knowledge, which is by nature difficult to transmit, is extremely important for both innovation and diffusion. This implies that much knowledge creation and diffusion is geographically localised and policy must take this into account.

In the first week of this course, students will review local system approaches and examine how new ideas about knowledge and innovation affect our understanding of the processes of innovation and of innovation policy. The focus is on the systemic features of innovation and how they play out in a local context. In the second week, we concentrate on taxonomies of innovation and knowledge flows. In some regions knowledge transmission across buyer-supplier links in value-chains are central, in other, science-based systems, innovation builds on scientific advances in university research. In some regions knowledge creation is key, in others knowledge absorption or adoption is central to the region's progress. Some regions are dominated by high tech, others by low tech, but innovation occurs in both. These axes all enter any taxonomy of regional innovation. One specific question we address is the role of universities in local development. Universities can be a source of novel knowledge and innovation, or a source of highly skilled labour. The role a university plays depends on what kind of local innovation is driving the region. In the third week, we concentrate on policies that attempt to build strong links among local agents in innovation chains or value chains (e.g. cluster policies, smart specialisation). For example, concerns about creating a critical mass of knowledge workers have led many regions to create "science parks", or "technopoles", hoping to generate new industries, or to become the next Silicon Valley. But less dramatic policies also exist. In the fourth week, we analyse the contents of successful policy. The main policy issue is how to create interactions among local knowledge actors that contribute to the performance of local economies. What can we learn from success stories from different local systems? For example, Italian industrial districts have often been considered paradoxical: small, relatively isolated regions in Italy, apparently poorly connected to the outside world, but they are world leaders in their fields. How does this happen, and could it be reproduced? Will smart cities be the new locus and focus of specialisation and growth? Has globalisation removed local effects or can local policy makers still influence their economies?

This course overall looks at how local agents interact in the innovation ecosystem. The goal is to analyse and understand how these local interactions and interventions contribute to the performance of the local economies, and to prepare policy recommendations for specific regional development strategies.

Course objectives

- Describe in detail the factors that feature in a local or regional innovation system;
- Understand policy considerations relevant to regional policy-makers.

- Be familiar with policy measures both actual and potential aimed at nurturing a regional innovation system;
- Understand the roles of different actors in the system.
- Generate ideas relevant to innovation policy design and improvement.
- Be comfortable with basic social network analysis using R and igraph software.

Prerequisites

None

Recommended reading

Course reader.

GID4206 Period 4 10 Mar 2025 4 Apr 2025 Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• R. Cowan

Teaching methods:

Lecture(s), PBL, Skills, Presentation(s), Assignment(s)

Assessment methods:

Presentation and paper, Assignment, Participation

Keywords:

knowledge, Innovation, Regions, Networks, diffusion, Smart Specialisation, Smart Cities, Metrics and Indicators, Smart Growth

Maastricht Graduate School of Governance

Innovation and Innovation Policy From A System Perspective

Full course description

Innovation plays a crucial role in promoting economic growth and how we understand and address global challenges relating to the Sustainable Development Goals (SDGs).

This course offers an overview of what innovation is and why it is important in various contexts and seeks to address key questions: who are the relevant actors involved in the innovation process? How can innovation contribute to socio-economic development? How can we guide policymakers globally to design, monitor and evaluate policy interventions aimed to enhance productivity, sustainable growth or social or environmental goals, depending on the specific objectives or given scope?

In the first week, students will be introduced to the fundamentals of innovation. They will be

exposed to the key concepts to identify and describe the innovation characteristics: types of innovation (product and process), the impact of innovation (radical and incremental), sources of innovation (technological and non-technological), as well as bottlenecks and hampering factors. Students will develop knowledge of the 'innovation systems' approach and gain insights into the many and varied interactions between, and the roles of, different actors, institutions and contexts. The second week will be dedicated to analysing cases where the market has failed to match incentives to the value of the innovation activity. This includes the problem of appropriability and the degree to which the returns from investment accrue to the innovator or to other market participants. Students will also learn about enhancing capability and catching up, innovation from a firm perspective, the role of the Intellectual Property Right (IPR), and open innovation.

The third week will focus on innovation indicators and innovation scoreboards. You will explore the challenging question of how to observe and measure innovation at the firm, industry and country levels. The objective is to familiarise students with tools and approaches such as innovation surveys, and to measure and interpret the appropriate quantitative indicators measuring innovation inputs and outputs.

The fourth week will consider global perspectives and students will reflect on the question: how does one country achieve rapid economic growth while others cannot? We will examine opportunities opened up by globalisation and the rise of emerging economies.

Throughout the course leading innovation and development experts will deliver guest lectures to establish credible connections between the material covered and their application including in the context of international organizations.

Course objectives

- Understand the nature of innovation; types of innovation, impact and source of innovation.
- Analyse new and emerging issues and types of innovation, e.g. social innovation, innovation for inclusive development, and public sector innovation.
- Access the systemic nature of innovation systems, identifying actors of the system and their roles
- Debate the incentives to innovate
- Analyse the rationale behind innovation policy
- Evaluate relevant policy instruments related to innovation.

As additional skills, students will acquire hands-on knowledge on a broad range of quantitative indicators to measure innovation performance (firm, industry, country) and learn how to apply them critically. You will also learn how to effectively debate policy-relevant issues.

Prerequisites

None

Recommended reading

• Greenhalgh, C., & Rogers, M. (2010). Innovation, intellectual property, and economic growth. Princeton University Press.,

GID4105

Period 4 3 Feb 2025 28 Feb 2025

Print course description

ECTS credits:

4.0

Coordinator:

• F. Visentin

Teaching methods:

Lecture(s), PBL, Presentations, Skills

Assessment methods:

Participation, Presentation and paper, Oral exam

Keywords:

Innovation; Market failures; Indicators; Innovation Systems; Innovation policy

Maastricht Graduate School of Governance

Innovation for Sustainability

Full course description

For meeting the target of limiting global warming to 1.5oC and reducing air pollution, we need innovations and transitions in energy and mobility, whereas for reducing (unsustainable) resource use and waste volumes, we need to close material loops (e.g. transition to a circular economy). Achieving those systemic transitions is difficult because of sunk costs advantages of existing technologies, infrastructure needs of new technologies, emerging innovations, institutional rigidities, resistance from incumbents and entrenched practices. In this context, this course looks at the role of innovation for achieving a sustainable economy, with special attention to barriers, elements and drivers of transformation and the role of public policy from a multi-level perspective.

During Week 1, the course examines the notion of innovation for sustainability, the circular economy as a transformative challenge for society, government and business, and two successful transitions: hygienic sanitation and the shift to recycling and waste incineration (through policies to divert waste from landfilling). Week 2 consists of lectures and readings on coordinating technological innovation systems, green industrial policy and the challenge of creating sustainable solutions in developing countries. In Week 3, the course looks at different perspectives on climate policy and the topic of an alternative economy, through a critical investigation of the global market economy and two alternatives for it: Kate Raworth's Doughnut economics model and Christian Felber's Economy for the Common Good.

The course will involve a group assignment – a paper about an eco-innovation, for which students should describe the following:

- the producers and prospective users;

the history of system-building activities;

the social and environmental sustainability advantages (compared to relevant alternatives);

the role of policy (with special attention to the interaction effects of policy mixes, whether they work in tandem or against each other, evidence of bad policies which are unnecessary or highly inefficient);

the degree of supply chain change, organisational change, and social innovation; and

the relevant institutional change needed for wider diffusion.

This task will be done in groups of three to four students. There will be two outputs: the paper (of around 3000 words) and a 15-minute PowerPoint presentation, to be presented by one or two of the students.

A hands-on skills development component is part of the course. This will take the form of a workshop on set theoretical comparative analysis and Q-methodology analysis in the field of innovation for sustainability.

Course objectives

- Explain why innovation is important for the economy and the SDGs.
- Describe the sources of the carbon lock-in and the lock-in to the take, make and waste paradigm.
- Assist policymakers to design better policies to support eco-innovation and a circular economy.
- Study the dynamics of specific eco-innovations and the need for new business models and alignment of multiple activities and strategies.

Prerequisites

None

Recommended reading

Course reader.

GID4408

Period 5

12 May 2025

6 Jun 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• S. Turkeli

Teaching methods:

Assignment(s), Paper(s), Research, Skills, Work in subgroups, Presentations

Assessment methods:

Presentation and paper, Participation, Oral exam

Keywords:

Innovation, Sustainability, lock-in, transition, circular economy

Maastricht Graduate School of Governance

Managing the Fourth Industrial Revolution

Full course description

New technologies associated with the Fourth Industrial Revolution hold out great promise in helping to achieve the Sustainable Development Goals (SDGs) by generating rapid, equitable and sustainable economic growth, by aiding the fight against climate change, and by improving health and education outcomes across the world. In equal measure, the development of this broad set of technologies - including 3D printing, nanotechnology, the internet of things, artificial intelligence and robotics, biotechnologies, neurotechnologies, virtual reality, energy capture, and blockchain - raises many economic, societal and ethical concerns. Concerns abound as to whether developing countries will be excluded from sharing the benefits of these technologies, for example, by limiting opportunities to develop through Global Value Chains, and to whether new technologies - and robotisation and artificial intelligence in particular - will deprive millions of their jobs, exacerbating inequality both within and across countries. Risks from big data also play a prominent role in the current debate. With the application of digitalisation technologies, many activities related to business and social lives can be captured and analysed and may lead to legal or political challenges. These developments suggest that attempts to maximise the benefits of these new technologies while minimising the social costs will involve a coordinated policy response.

This course identifies the opportunities and threats associated with emerging technologies and considers the appropriate policy responses to these new technologies. Week 1 will introduce the concept of the Fourth Industrial Revolution, identify the opportunities and threats from the associated new technologies, and discuss the emerging evidence on their impacts. In Week 2, the course will provide skill development sessions and discuss employment issues related to the emergence of new technologies. The first skill development lecture will demonstrate the collection and use of big data, and offer a general view on managing megadata in analysing science, technology and innovations. Week 3 continues with skill development lectures and also focusses on the dark side of innovation, discussing the "unintended" negative effects of new technologies and the risks and concerns of big data. The second and third skills development lectures will introduce machine learning and provide an overview of methods from natural language processing. Finally, in Week 4 the course concentrates on forward-looking strategies. We will look at different policies in both developed and developing countries and explore how countries find their own strategies towards coping with the challenges imposed by the Fourth Industrial Revolution.

Course objectives

- Explain what is meant by the Fourth Industrial Revolution, the technologies that are involved and the potential opportunities and threats that these technologies have on society and development opportunities
- Develop skills of detecting and assessing emerging technologies (e.g. MySQL skills for exploring patent databases)
- Acquire knowledge on machine learning techniques
- Identify the set of policies that are relevant to encourage the appropriate development of new technologies
- Understand the impact of digitalisation on the economy and society
- Explain the role of policy as a development tool in the context of emerging technologies
- Identify the potential negative consequences to society and to individuals of emerging technologies and identify appropriate policy responses to mitigate these consequences

Prerequisites

None

Recommended reading

Course reader

GID4307

Period 5

14 Apr 2025

9 May 2025

Print course description

ECTS credits:

4.0

Instruction language:

English

Coordinator:

• L. Wang

Teaching methods:

Assignment(s), Paper(s), Research, Skills, Work in subgroups

Assessment methods:

Written exam, Assessment, Final paper, Final take home exam, Presentation and paper, Take home exam, Participation

Keywords:

Fourth Industrial Revolution; Emerging technologies; Innovation policy; Labour markets; Risks of big data; Machine learning

Thesis

The master thesis is 16 ECTS.

Maastricht Graduate School of Governance

Master Thesis

Full course description

The Master's thesis forms an integral part of the overall Master's programming, accounting for one third of the overall degree. Students are required to write an independent Master's thesis that demonstrates their ability to conduct original research. Between September and December, a number of events take place in order to introduce students to research topics and potential supervisors, and to prepare students for the development of their research proposals and related research ethics considerations. The thesis proposal is due in January. Following the approval of the research proposals, students are then supported by their supervisors to further develop and conduct their research projects. The completed theses are due in June and then defended.

The Master's Thesis is therefore divided into three core components:

1. Period 1-2 (September-December): Finding a supervisor and writing the thesis proposal.

During this period, students identify a research topic of interest and find a matching supervisor. With input from their supervisors, students then develop their thesis proposals (due January).

- 2. Period 3 (January): Methods Workshops. A series of methods workshops is offered to equip students with the advanced methodological knowledge and skills they may need to successfully complete their thesis projects.
- 3. Period 4-6 (February-June): Research, completion of the thesis and defence. Between February and June, students are expected to work on their thesis project and seek the advice and feedback of their selected supervisor. The final thesis is due in June. In addition to submitting their written theses, students are required to present and defend their research.

Course objectives

By the end of the master's thesis, students should be able to:

- Match and apply theories, concepts, and knowledge learned in the programme to the thesis topic;
- Express and defend in-depth knowledge on a specific topic;
- Synthesize existing literature and identify research gaps on a specific topic;
- Develop relevant research design and implement appropriate research methods for a specific research question;
- Evaluate results from literature and data in order to make contributions to the overall field of study;
- Provide policy recommendations based on the evaluation and synthesis of the research findings, in relation to the field of study and policy area.

Prerequisites

There are no specific prerequisites for this course.

MTH4911

Year

2 Sep 2024

6 Jun 2025

Print course description

ECTS credits:

16.0

Instruction language:

English

Coordinator:

• L.F. Krebs

Teaching methods:

Lecture(s), Research, Assignment(s), Training(s)

Assessment methods:

Attendance, Presentation and paper, Final paper

Keywords:

Philosophy of science; Research design; Research methods