Master in Economics: Econometrics

Programme mnemonic
MA-ECOE
- Focus Research in Economics: M-ECOER
- Focus Research in Economics and statistics: M-ECOES

Studies level
Master 120 credits

Learning language
English

Schedule
Office hours

Studies category / subcategory
Economics and business management / Economics

Campus
Solbosch

Programme objectives
The research-oriented Masters in Economics and in Economics and Statistics provide students with the theoretical and statistical tools required to pursue advanced analysis and research in economics.

This programme is offered in two versions:
- The research-oriented Master in Economics provides general training in all areas of economics
- The research-oriented Master in Economics and Statistics offers students the possibility to specialise in topics at the intersection between economics and statistics.

Programme's added value
The Solvay Brussels School assets
- A tradition of rigorous and demanding curricula based on solid multidisciplinary and analytical training, promoting critical thinking and problem-solving skills.
- A diversity of teaching methods that are constantly revised to ensure teaching effectiveness.
- A diverse and international student body (up to 80% in some Master programmes).
- A comprehensive educational offering covering economics and business from the bachelor to in-company training.
- Accreditation from EQUIS (European Foundation for Management Development) and AMBA (Association of Masters of Business Administration). AACSB (Association to Advance Collegiate Schools of Business) accreditation is underway.

Teaching methods
Teaching methods are based on a demanding system that combines theoretical and quantitative training content. The first-year of the programme is preceded by a 'Maths Camp' whose purpose is to bring all future students of the Master to the same high level of mathematical skills required for advanced coursework in economics. Students can then follow advanced courses in economics (macroeconomics, microeconomics, and econometrics), supplemented by a rich array of field courses covering virtually all the main branches of economics.

Succeed in your studies
Choose
The information and guidance counsellors at the InfOR-études service will help you choose your studies throughout the year.

Succeed
Take part in preparatory courses or get help to succeed before or during your studies.

Get help
Apply for financial aid, look for accommodation or a student job, get support for your specific needs.
Job opportunities

Most graduates of the research-oriented Master programmes start a PhD in economics, either at ECARES (European Centre for Advanced Research in Economics and Statistics) or abroad. The highly stimulating and demanding doctoral programme at ECARES leads to a variety of job opportunities, including:

- Researcher or assistant professor in a research institute or a university (London School of Economics, Boston University, Oxford University, Central European University, etc.)
- Economist in international institutions (OECD, European Commission, World Bank, European Central Bank, etc.)
- Specialised consultant (Compass-Lexecon, Charles River Associates, OXERA, etc.)
- Finance professional

Notable alumni include:

- Marianne Bertrand, Professor of Economics, University of Chicago, Booth School of Business
- Natalie Chen, Professor of Economics, University of Warwick
- Elisabetta Cornago, Environmental Economist, OECD - PhD candidate in Economics at ECARES, ULB
- Pénélope Papandropoulos, Coordinator State Aid in Chief Economist Team of DG Competition – European Commission
- Christophe Soil, CEO, Brussels Planning Bureau

Contacts

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+32 2 650 39 10
http://www.solvay.edu/bachelors-masters

Jury President
Luca Paolo Merlino

Jury Secretary
Mattia Nardotto
Master in Economics : Econometrics
Focus Research in Economics

Both variants of the Master consist of a common core of required courses, and a series of elective courses; they also both require the writing of a master’s thesis.

The research-oriented Master in Economics offers two specialisation tracks:

- Advanced Methods
- Topics in Economics

The research-oriented Master in Economics and Statistics offers two specialisation tracks:

- Economics
- Statistics

**Bloc 1 | M-ECOER | MA-ECOE**

**Cours Obligatoires**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Instructor(s)</th>
<th>Credits</th>
<th>Term</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON-S427</td>
<td>Graduate macroeconomics I</td>
<td>Fabio Blasutto (Coordinator)</td>
<td>10</td>
<td>First term</td>
<td>English</td>
</tr>
<tr>
<td>ECON-S428</td>
<td>Graduate econometrics I</td>
<td>Germain VAN BEVER (Coordinator)</td>
<td>10</td>
<td>First term</td>
<td>English</td>
</tr>
<tr>
<td>ECON-S429</td>
<td>Graduate econometrics II</td>
<td>Paula Eugenia GOBBI (Coordinator) and Alejandra Ramos</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
</tr>
<tr>
<td>ECON-S430</td>
<td>Graduate macroeconomics II</td>
<td>Robert KOLLMANN (Coordinator)</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
</tr>
<tr>
<td>ECON-S431</td>
<td>Graduate microeconomics II</td>
<td>Luca Paolo Merlino (Coordinator)</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
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<tr>
<td>ECON-S510</td>
<td>Graduate microeconomics I</td>
<td>Georg KIRCHSTEIGER (Coordinator)</td>
<td>10</td>
<td>First term</td>
<td>English</td>
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<tr>
<td>ECON-S517</td>
<td>Research topics</td>
<td>Philip VERWIMP (Coordinator) and Gani ALDASHEV</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
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<tr>
<td>MATH-S400</td>
<td>Mathematics and economic modelling</td>
<td>Thomas DEMUYNCK (Coordinator), Bram DE ROCK and Marjorie GASSNER</td>
<td>5</td>
<td>First term</td>
<td>English</td>
</tr>
<tr>
<td>MATH-S401</td>
<td>Dynamic optimization</td>
<td>Thomas DEMUYNCK (Coordinator), Bram DE ROCK and Luca Paolo Merlino</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
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</table>
Cours Obligatoires

ECON-S504  
**Research methods and research communication**  | Philip VERWIMP (Coordinator)
- 5 credits [lecture: 36h]  
- First term  
- English

MEMO-S522  
**Research seminar and master Thesis**
- 25 credits  
- First and second terms  
- English

Cours Optionnels

Choisir parmi les 2 filières proposées (15 crédits dans chaque filière)

*A total of 30 credits chosen from the following*

**Advanced methods**

*A total of 15 credits chosen from the following*

ECON-S460  
**Advanced topics in microeconomics**  | Micael CASTANHEIRA DE MOURA (Coordinator)
- 5 credits [lecture: 24h]  
- Second term  
- English

ECON-S461  
**Advanced topics in macroeconomics**
- 5 credits [lecture: 24h]  
- Second term  
- English

ECON-S513  
**Behavioral economics**  | Georg KIRCHSTEIGER (Coordinator)
- 5 credits [lecture: 24h]  
- English

ECON-S519  
**Graduate microeconomics III**  | Georg KIRCHSTEIGER (Coordinator)
- 5 credits [lecture: 24h]  
- First term  
- English

ECON-S520  
**Graduate macroeconomics III**
- 5 credits [lecture: 36h]  
- First term  
- English

ECON-S521  
**Graduate econometrics III**  | David PREINERSTORFER (Coordinator)
- 5 credits [lecture: 24h]  
- Second term  
- English

*Ce cours ne sera pas donné en 2022-2023.*

*One course chosen from the following*

HULB-0000  
**Cours externe à l’Université**
- 5 credits  
- Academic year

HULB-0000  
**Cours externe à l’Université**
- 10 credits  
- Academic year

STAT-F404  
**Graduate statistics**  | Thomas VERDEBOUT (Coordinator) and Davy PAINDAVEINE
- 5 credits [lecture: 24h]  
- First term  
- English
### Topics in economics

**A total of 15 credits chosen from the following**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Terms</th>
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</tr>
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<tbody>
<tr>
<td>ECON-S320</td>
<td>Advanced topics in international economics</td>
<td>Mathieu Parenti (Coordinator)</td>
<td>5</td>
<td>2nd</td>
<td>English</td>
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<tr>
<td>ECON-S432</td>
<td>Advanced international trade</td>
<td>Paola Conconi (Coordinator) and</td>
<td>5</td>
<td>2nd</td>
<td>English</td>
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<tr>
<td>ECON-S451</td>
<td>Advanced industrial organization</td>
<td>Mattia Nardotto (Coordinator)</td>
<td>5</td>
<td>2nd</td>
<td>English</td>
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<tr>
<td>ECON-S453</td>
<td>Impact analysis</td>
<td>Philip Verwimp (Coordinator)</td>
<td>5</td>
<td>1st</td>
<td>English</td>
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<tr>
<td>ECON-S529</td>
<td>Development economics</td>
<td>Philip Verwimp (Coordinator)</td>
<td>5</td>
<td>2nd</td>
<td>English</td>
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<tr>
<td>HULB-0000</td>
<td>Cours externe à l'Université</td>
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<tr>
<td>HULB-0000</td>
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Master in Economics: Econometrics
Focus Research in Economics and statistics

Both variants of the Master consist of a common core of required courses, and a series of elective courses; they also both require the writing of a master’s thesis.

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The research-oriented Master in Economics and Statistics offers two specialisation tracks:

- Economics
- Statistics

Bloc 1 | M-ECOES | MA-ECOE

Cours obligatoires

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Coordinator(s)</th>
<th>Credits</th>
<th>Lecture hours: Tutorial hours</th>
<th>Term</th>
<th>Language</th>
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<tr>
<td>ECON-S427</td>
<td>Graduate macroeconomics I</td>
<td>Fabio Blasutto (Coordinator)</td>
<td>10</td>
<td>24:24</td>
<td>First</td>
<td>English</td>
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<tr>
<td>ECON-S428</td>
<td>Graduate econometrics I</td>
<td>Germain VAN BEVER (Coordinator)</td>
<td>10</td>
<td>24:24</td>
<td>First</td>
<td>English</td>
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<td>ECON-S429</td>
<td>Graduate econometrics II</td>
<td>Paula Eugenia GOBBI (Coordinator) and Alejandra Ramos</td>
<td>5</td>
<td>24:24</td>
<td>Second</td>
<td>English</td>
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<tr>
<td>ECON-S430</td>
<td>Graduate macroeconomics II</td>
<td>Robert KOLLMANN (Coordinator)</td>
<td>5</td>
<td>24:24</td>
<td>Second</td>
<td>English</td>
</tr>
<tr>
<td>ECON-S431</td>
<td>Graduate microeconomics II</td>
<td>Luca Paolo Merlino (Coordinator)</td>
<td>5</td>
<td>24:24</td>
<td>Second</td>
<td>English</td>
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<tr>
<td>ECON-S510</td>
<td>Graduate microeconomics I</td>
<td>Georg KIRCHSTEIGER (Coordinator)</td>
<td>10</td>
<td>24:24</td>
<td>First</td>
<td>English</td>
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<tr>
<td>STAT-F404</td>
<td>Graduate statistics</td>
<td>Thomas VERDEBOUT (Coordinator) and Davy PAINDAVEINE</td>
<td>5</td>
<td>24</td>
<td>First</td>
<td>English</td>
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<tr>
<td>STAT-F405</td>
<td>Time series analysis</td>
<td>Yves-Caoimhin SWAN (Coordinator)</td>
<td>5</td>
<td>24:12</td>
<td>First</td>
<td>English</td>
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<tr>
<td>STAT-F407</td>
<td>Stochastic models</td>
<td>Maarten JANSEN (Coordinator) and Jennifer ALONSO GARCIA</td>
<td>5</td>
<td>36:12</td>
<td>First</td>
<td>English</td>
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Master in Economics : Econometrics
Focus Research in Economics and statistics

Bloc 2 | M-ECOES | MA-ECOE

Cours obligatoires

ECON-S504 | Research methods and research communication | Philip VERWIMP (Coordinator)
☐ 5 credits [lecture: 36h] ☐ first term ☐ English

MEMO-S522 | Research seminar and master Thesis
☐ 25 credits ☐ first and second terms ☐ English

Cours optionnels

Parmi les 2 filières proposées,

A total of 25 credits chosen from the following

Economics

2 to 4 courses chosen from the following

ECON-S320 (optional) | Advanced topics in international economics | Mathieu PARENTI (Coordinator)
☐ 5 credits [lecture: 24h] ☐ second term ☐ English

ECON-S432 (optional) | Advanced international trade | Paola CONCONI (Coordinator) and Mathieu PARENTI
☐ 5 credits [lecture: 24h] ☐ second term ☐ English

ECON-S451 (optional) | Advanced industrial organization | Mattia Nardotto (Coordinator)
☐ 5 credits [lecture: 24h, tutorial classes: 24h] ☐ second term ☐ English

ECON-S453 (optional) | Impact analysis | Philip VERWIMP (Coordinator)
☐ 5 credits [lecture: 12h, tutorial classes: 12h] ☐ first term ☐ English

ECON-S460 (optional) | Advanced topics in microeconomics | Micael CASTANHEIRA DE MOURA (Coordinator)
☐ 5 credits [lecture: 24h] ☐ second term ☐ English

ECON-S461 (optional) | Advanced topics in macroeconomics
☐ 5 credits [lecture: 24h] ☐ second term ☐ English

ECON-S513 (optional) | Behavioral economics | Georg KIRCHSTEIGER (Coordinator)
☐ 5 credits [lecture: 24h] ☐ second term ☐ English

ECON-S519 (optional) | Graduate microeconomics III | Georg KIRCHSTEIGER (Coordinator)
☐ 5 credits [lecture: 24h] ☐ first term ☐ English

ECON-S520 (optional) | Graduate macroeconomics III
☐ 5 credits [lecture: 36h] ☐ first term ☐ English

ECON-S521 (optional) | Graduate econometrics III | David PREINERSTORFER (Coordinator)
☐ 5 credits [lecture: 24h] ☐ second term ☐ English

Ce cours ne sera pas donné en 2022-2023.
Statistics

2 to 4 courses chosen from the following

- **HULB-0000** (optional) - Cours exténtre à l'Université
  - 5 credits
  - academic year

- **INFO-F422** (optional) - Statistical foundations of machine learning | Gianluca BONTEMPI (Coordinator)
  - 5 credits [lecture: 24h, tutorial classes: 12h, project: 60h]
  - second term
  - English

- **STAT-F408** (optional) - Computational statistics | Maarten JANSEN (Coordinator)
  - 5 credits [lecture: 24h, tutorial classes: 12h, project: 100h]
  - second term
  - English

- **STAT-F418** (optional) - Topics in nonparametric smoothing | Maarten JANSEN (Coordinator)
  - 5 credits [lecture: 24h, tutorial classes: 12h]
  - first term
  - English
  *Ce cours n'est pas donné en 2023-24, 2025-26 etc.*

- **STAT-F420** (optional) - Topics in mathematical statistics | Thomas VERDEBOUT (Coordinator)
  - 5 credits [lecture: 24h, tutorial classes: 12h]
  - first term
  - English

- **STAT-F421** (optional) - Topics in probability theory | Yves-Caoimhin SWAN (Coordinator)
  - 5 credits [lecture: 24h, tutorial classes: 12h]
  - second term
  - English
  *Ce cours n'est pas donné en 2024-2025, 2026-2027 etc.*

- **STAT-F507** (optional) - Sequential analysis
  - 5 credits [lecture: 24h]
  - second term
  - English

- **TEMP-0000** (optional) - Cours extérieurs au programme
  - 5 credits
  - academic year
  - French