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

ECON-5427  Graduate macroeconomics I  Ansgar Rannenberg (Coordinator)
- 10 credits [lecture: 24h, tutorial classes: 24h]  
- first term  
- English

ECON-5428  Graduate econometrics I  Germain VAN BEVER (Coordinator)
- 10 credits [lecture: 24h, tutorial classes: 24h]  
- first term  
- English

ECON-5429  Graduate econometrics II  Mattia Nardotto (Coordinator) and Paula Eugenia GOBBI
- 5 credits [lecture: 24h, tutorial classes: 24h]  
- second term  
- English

ECON-5430  Graduate macroeconomics II  Robert KOLLMANN (Coordinator)
- 5 credits [lecture: 24h, tutorial classes: 24h]  
- second term  
- English

ECON-5431  Graduate microeconomics II  Patrick LEGROS (Coordinator) and Zsolt UDVARI
- 5 credits [lecture: 24h, tutorial classes: 24h]  
- second term  
- English

ECON-5510  Graduate microeconomics I  Georg KIRCHSTEIGER (Coordinator)
- 10 credits [lecture: 24h, tutorial classes: 24h]  
- first term  
- English

ECON-5517  Research topics  Philip VERWIMP (Coordinator), Gani ALDASHEV and Mathieu PARENTI
- 5 credits [lecture: 24h]  
- second term  
- English

MATH-5400  Mathematics and economic modelling  Thomas DEMUYNCK (Coordinator), Bram DE ROCK and Luca Paolo Merlino
- 5 credits [lecture: 36h, tutorial classes: 24h]  
- first term  
- English

MATH-5401  Dynamic optimization  Thomas DEMUYNCK (Coordinator), Bram DE ROCK and Luca Paolo Merlino
- 5 credits [lecture: 36h, tutorial classes: 24h]  
- second term  
- English
Master in Economics: Econometrics
Focus Research in Economics

Bloc 2 | M-ECOER | 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

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 (optional)  Advanced topics in microeconomics  Micael CASTANHEIRA DE MOURA (Coordinator)
5 credits  lecture: 24h  second term  English

ECON-S461 (optional)  Advanced topics in macroeconomics  Heiko HESSE (Coordinator)
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), Oyvind AAS and Patrick LEGROS
5 credits  lecture: 24h  first term  English

ECON-S520 (optional)  Graduate macroeconomics III  Filipp Ushchev (Coordinator) and Mathieu PARENTI
5 credits  lecture: 36h  second term  English

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

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 (optional)  Graduate statistics  Thomas VERDEBOUT (Coordinator) and Davy PAINDAVEINE
5 credits  lecture: 36h  first term  English
Topics in economics

A total of 15 credits chosen from the following

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

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

**ECON-S451**  
**Advanced industrial organization** | Patrick LEGROS (Coordinator) and Axel Gautier  
5 credits [lecture: 24h, tutorial classes: 24h]  
second term  
English

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

**ECON-S529**  
**Development economics** | Philip VERWIMP (Coordinator) and Yasmine BEKKOUCHE  
5 credits [lecture: 24h]  
second term  
English

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
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.

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-ECOES | MA-ECOE

Cours obligatoires

- **ECON-S427**  
  Graduate macroeconomics I | Ansgar Rannenberg (Coordinator)  
  10 credits [lecture: 24h, tutorial classes: 24h]  
  first term  
  English

- **ECON-S428**  
  Graduate econometrics I | Germain VAN BEVER (Coordinator)  
  10 credits [lecture: 24h, tutorial classes: 24h]  
  first term  
  English

- **ECON-S429**  
  Graduate econometrics II | Mattia Nardotto (Coordinator) and Paula Eugenia GOBBI  
  5 credits [lecture: 24h, tutorial classes: 24h]  
  second term  
  English

- **ECON-S430**  
  Graduate macroeconomics II | Robert KOLLMANN (Coordinator)  
  5 credits [lecture: 24h, tutorial classes: 24h]  
  second term  
  English

- **ECON-S431**  
  Graduate microeconomics II | Patrick LEGROS (Coordinator) and Zsolt UDVARI  
  5 credits [lecture: 24h, tutorial classes: 24h]  
  second term  
  English

- **ECON-S510**  
  Graduate microeconomics I | Georg KIRCHSTEIGER (Coordinator)  
  10 credits [lecture: 24h, tutorial classes: 24h]  
  first term  
  English

- **STAT-F404**  
  Graduate statistics | Thomas VERDEBOUT (Coordinator) and Davy PAINDAVEINE  
  5 credits [lecture: 36h]  
  first term  
  English

- **STAT-F405**  
  Time series analysis | Yves-Caoimhin SWAN (Coordinator)  
  5 credits [lecture: 24h, tutorial classes: 12h]  
  first term  
  English

- **STAT-F407**  
  Stochastic models | Jennifer ALONSO GARCIA (Coordinator) and Maarten JANSEN  
  5 credits [lecture: 36h, tutorial classes: 12h]  
  first term  
  English
Master in Economics : Econometrics
Focus Research in Economics and statistics

Bloc 2 | M-ECOES | MA-ECOE

Cours obligatoires

<table>
<thead>
<tr>
<th>ECON-S504</th>
<th>Research methods and research communication</th>
<th>Philip VERWIMP (Coordinator)</th>
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</thead>
<tbody>
<tr>
<td>5 credits [lecture: 36h]</td>
<td>first term</td>
<td>English</td>
</tr>
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</table>

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

<table>
<thead>
<tr>
<th>ECON-S320 (optional)</th>
<th>Advanced topics in international economics</th>
<th>Mathieu PARENTI (Coordinator)</th>
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</thead>
<tbody>
<tr>
<td>5 credits [lecture: 24h]</td>
<td>second term</td>
<td>English</td>
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<thead>
<tr>
<th>ECON-S432 (optional)</th>
<th>Advanced international trade</th>
<th>Paola CONCONI (Coordinator) and Mathieu PARENTI</th>
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<tbody>
<tr>
<td>5 credits [lecture: 24h]</td>
<td>second term</td>
<td>English</td>
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<thead>
<tr>
<th>ECON-S451 (optional)</th>
<th>Advanced industrial organization</th>
<th>Patrick LEGROS (Coordinator) and Axel Gautier</th>
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<tbody>
<tr>
<td>5 credits [lecture: 24h, tutorial classes: 24h]</td>
<td>second term</td>
<td>English</td>
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<table>
<thead>
<tr>
<th>ECON-S453 (optional)</th>
<th>Impact analysis</th>
<th>Philip VERWIMP (Coordinator) and Olivier Sterck</th>
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<td>5 credits [lecture: 12h, tutorial classes: 12h]</td>
<td>first term</td>
<td>English</td>
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<table>
<thead>
<tr>
<th>ECON-S460 (optional)</th>
<th>Advanced topics in microeconomics</th>
<th>Micael CASTANHEIRA DE MOURA (Coordinator)</th>
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<td>5 credits [lecture: 24h]</td>
<td>second term</td>
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<thead>
<tr>
<th>ECON-S461 (optional)</th>
<th>Advanced topics in macroeconomics</th>
<th>Heiko HESSE (Coordinator)</th>
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<td>5 credits [lecture: 24h]</td>
<td>second term</td>
<td>English</td>
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<thead>
<tr>
<th>ECON-S513 (optional)</th>
<th>Behavioral economics</th>
<th>Georg KIRCHSTEIGER (Coordinator)</th>
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<td>second term</td>
<td>English</td>
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<thead>
<tr>
<th>ECON-S519 (optional)</th>
<th>Graduate microeconomics III</th>
<th>Georg KIRCHSTEIGER (Coordinator), Oyvind AAS and Patrick LEGROS</th>
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<tbody>
<tr>
<td>5 credits [lecture: 24h]</td>
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<td>English</td>
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<table>
<thead>
<tr>
<th>ECON-S520 (optional)</th>
<th>Graduate macroeconomics III</th>
<th>Filipp Ushchev (Coordinator) and Mathieu PARENTI</th>
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<tr>
<td>5 credits [lecture: 36h]</td>
<td>second term</td>
<td>English</td>
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<th>ECON-S521 (optional)</th>
<th>Graduate econometrics III</th>
<th>David PREINERSTORFER (Coordinator)</th>
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<td>second term</td>
<td>English</td>
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Statistics

2 to 4 courses chosen from the following
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Credits</th>
<th>Term</th>
<th>Language</th>
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<tbody>
<tr>
<td>HULB-0000</td>
<td>Cours externe à l'Université</td>
<td>5</td>
<td>Academic year</td>
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<tr>
<td>INFO-F422</td>
<td>Statistical foundations of machine learning</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
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<td></td>
<td>Gianluca BONTEMPI (Coordinator)</td>
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<tr>
<td>STAT-F408</td>
<td>Computational statistics</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
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<td></td>
<td>Maarten JANSEN (Coordinator)</td>
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<tr>
<td>STAT-F418</td>
<td>Topics in nonparametric smoothing</td>
<td>5</td>
<td>First term</td>
<td>English</td>
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<td></td>
<td>Maarten JANSEN (Coordinator)</td>
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<tr>
<td></td>
<td>Ce cours n’est pas donné en 2022-23, 2024-25 etc.</td>
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<tr>
<td>STAT-F420</td>
<td>Topics in mathematical statistics</td>
<td>5</td>
<td>First term</td>
<td>English</td>
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<tr>
<td></td>
<td>Thomas VERDEBOUT (Coordinator)</td>
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<tr>
<td></td>
<td>Ce cours n’est pas donné en 2023-24, 2025-26, etc.</td>
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<tr>
<td>STAT-F421</td>
<td>Topics in probability theory</td>
<td>5</td>
<td>Second term</td>
<td>English</td>
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<tr>
<td></td>
<td>Yves-Caoimhin SWAN (Coordinator)</td>
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<td>Ce cours est donné un an sur deux.</td>
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<td>STAT-F507</td>
<td>Sequential analysis</td>
<td>5</td>
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<tr>
<td>TEMP-0000</td>
<td>Cours extérieurs au programme</td>
<td>5</td>
<td>Academic year</td>
<td>French</td>
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