DOUBLE DEGREE PROGRAMME
AMU/AMSE
Konstanz University
The first year will take place in Germany/Konstanz

<table>
<thead>
<tr>
<th>TERM 1 - Courses</th>
<th>ECTS</th>
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</thead>
<tbody>
<tr>
<td>Advanced Econometrics</td>
<td>10</td>
</tr>
<tr>
<td>Advanced Macroeconomics I</td>
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<tr>
<td>Advanced Microeconomics I</td>
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<table>
<thead>
<tr>
<th>TERM 2 - Courses</th>
<th>ECTS</th>
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</thead>
<tbody>
<tr>
<td>Four courses and one seminar from the following areas:</td>
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<tr>
<td>Advanced Microeconomics II</td>
<td>6</td>
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<tr>
<td>Applied Time Series</td>
<td>8</td>
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<tr>
<td>Choose between:</td>
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<tr>
<td>Computational Economics</td>
<td>10</td>
</tr>
<tr>
<td>International Monetary Economics</td>
<td>8</td>
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<tr>
<td>Political Economy</td>
<td>10</td>
</tr>
<tr>
<td>Economics of taxation</td>
<td>8</td>
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<tr>
<td>Risk Management</td>
<td>8</td>
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<tr>
<td>Labour market search</td>
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The second year will take place in France/Marseille

The student may choose between one of the four tracks:

**Track 1 - Empirical and theoretical economics**

<table>
<thead>
<tr>
<th>TERM 3 - Courses</th>
<th>ECTS</th>
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<tbody>
<tr>
<td>Common core</td>
<td>9</td>
</tr>
<tr>
<td>- Advanced macroeconomics</td>
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<tr>
<td>- Advanced microeconomics</td>
<td></td>
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<tr>
<td>- Advanced econometrics</td>
<td></td>
</tr>
<tr>
<td>Economics of networks - Development economics</td>
<td>6</td>
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<tr>
<td>- Economics of networks</td>
<td></td>
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<tr>
<td>- Development economics</td>
<td></td>
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<tr>
<td>Introduction to research</td>
<td>3</td>
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<tr>
<td>- Research questions</td>
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<td>Elective teaching units (choose 1 among 2)</td>
<td>6</td>
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<tr>
<td>- Political economy - Incentives theory</td>
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<td>- Political economy</td>
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<tr>
<td>- Incentives theory</td>
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<tr>
<td>- Macroeconomic cycles - Dynamic macroeconomics</td>
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<tr>
<td>- Macroeconomic cycles</td>
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<tr>
<td>- Dynamic macroeconomics</td>
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<td>Elective teaching units (choose 1 among 2)</td>
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<tr>
<td>- Public choice - International trade</td>
<td>6</td>
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<tr>
<td>- International trade</td>
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<tr>
<td>- Public choice</td>
<td></td>
</tr>
<tr>
<td>- Health economics - Environmental economics</td>
<td>6</td>
</tr>
<tr>
<td>- Health economics</td>
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<tr>
<td>- Environmental economics</td>
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<table>
<thead>
<tr>
<th>TERM 4 - Courses</th>
<th>ECTS</th>
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<tbody>
<tr>
<td>Research methodology</td>
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<tr>
<td>- Research methodology I</td>
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<tr>
<td>- Research methodology II</td>
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<tr>
<td>Research dissertation or end-of-study internship with report and defence</td>
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<tr>
<td>Elective teaching units (choose 1 among 2)</td>
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<tr>
<td>- Labor economics - Labor econometrics</td>
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<tr>
<td>- Labor economics</td>
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<tr>
<td>- Labor econometrics</td>
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<tr>
<td>- Advanced econometrics</td>
<td>6</td>
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<tr>
<td>- Automatic model selection methods</td>
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<tr>
<td>- Theoretical econometric</td>
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<td>TERM 3 - Courses</td>
<td>ECTS</td>
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<td>----------------------------------------------------------</td>
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<tr>
<td>Methodology</td>
<td>6</td>
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<tr>
<td>- Writing and oral communication training</td>
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<td>- Project management</td>
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<td>Decision-making support: quantitative methods</td>
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<tr>
<td>- Quantitative tools in economics</td>
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<tr>
<td>- Public policies econometrics</td>
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<tr>
<td>Contemporary economy issues</td>
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<tr>
<td>- Applied economics issues</td>
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<tr>
<td>- Big data and public policies</td>
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<tr>
<td>- Transitions and economic policies</td>
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<tr>
<td>Elective teaching units (choose 3 among 6)</td>
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<tr>
<td>- Economics, finance and crises</td>
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</tr>
<tr>
<td>- Economics, finance and crises</td>
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<tr>
<td>- Programming for Big Data (Python, SQL, noSQL, etc)</td>
<td>3</td>
</tr>
<tr>
<td>- Programming for Big Data (Python, SQL, noSQL, etc)</td>
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<tr>
<td>- Development economics</td>
<td>3</td>
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<tr>
<td>- Development economics</td>
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<tr>
<td>- Health economics</td>
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<td>- Health economics</td>
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<tr>
<td>- Environmental economics</td>
<td>3</td>
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<tr>
<td>- Environmental economics</td>
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<tr>
<td>- Housing economics</td>
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<tr>
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<table>
<thead>
<tr>
<th>TERM 4 - Courses</th>
<th>ECTS</th>
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<tbody>
<tr>
<td>Knowledge of the professional environment</td>
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<tr>
<td>- Corporate strategy</td>
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<tr>
<td>- Collaborating with public organizations</td>
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<td>End-of-study internship with report and defence</td>
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### Track 3 - Econometrics, Big Data, Statistics

<table>
<thead>
<tr>
<th>TERM 3 - Courses</th>
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<tbody>
<tr>
<td>Non-linear models: theory and applications</td>
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<tr>
<td>- Transition and duration models</td>
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<td>- Models for truncated and censored variables</td>
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<tr>
<td>Advanced econometrics I: theory and applications</td>
<td>6</td>
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<tr>
<td>- Non parametric methods in econometrics</td>
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<tr>
<td>- Multivariate and non-linear time series</td>
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<tr>
<td>Advanced econometrics II: theory and applications</td>
<td>6</td>
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<tr>
<td>- Methodology of econometrics and statistical studies</td>
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<tr>
<td>- Advanced econometrics</td>
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</tr>
<tr>
<td>Languages, softwares and tools for Big Data</td>
<td>6</td>
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<tr>
<td>- Programming for Big Data (Python, SQL, noSQL, etc)</td>
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<tr>
<td>- Software for big data</td>
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<tr>
<td>Applications for Big Data: elective teaching units (choose 2 among 4)</td>
<td>6</td>
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<tr>
<td>- Big data and public policies</td>
<td>3</td>
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<tr>
<td>- Big data and quantitative marketing</td>
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<tr>
<td>- Big data and finance</td>
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<tr>
<td>- Big data: other applications</td>
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<tr>
<td>END OF STUDY INTERNSHIP WITH REPORT AND DEFENCE</td>
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<table>
<thead>
<tr>
<th>TERM 4 - Courses</th>
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</thead>
<tbody>
<tr>
<td>Advanced methods in Big Data</td>
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<tr>
<td>- Automatic model selection methods</td>
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<tr>
<td>- Predictive methods</td>
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<tr>
<td>- Machine learning and statistical learning</td>
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<tr>
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## Track 4 - Quantitative finance and insurance

### TERM 3 - Courses

<table>
<thead>
<tr>
<th>Course Description</th>
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<tbody>
<tr>
<td>Theory of financial markets</td>
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<tr>
<td>- Models of finance</td>
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<td>- Portfolio management</td>
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<tr>
<td>Economic and financial analyses</td>
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<tr>
<td>- Corporate finance I</td>
<td></td>
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<tr>
<td>- Economics of risk and insurance</td>
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<tr>
<td>Mathematics and statistics for finance</td>
<td>6</td>
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<tr>
<td>- Stochastic finance</td>
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<tr>
<td>- Econometrics of banking and finance</td>
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<tr>
<td>Quantitative methods in finance and insurance</td>
<td>6</td>
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<tr>
<td>- Big data and finance</td>
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<tr>
<td>- Actuarial science I</td>
<td></td>
</tr>
<tr>
<td>Economics of finance</td>
<td>6</td>
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<tr>
<td>- Economics, finance and crises</td>
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<tr>
<td>- Innovation and finance</td>
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### TERM 4 - Courses

<table>
<thead>
<tr>
<th>Elective Teaching Units (choose 2 among 4)</th>
<th>ECTS</th>
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</thead>
<tbody>
<tr>
<td>End-of-study internship with report and defence</td>
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<tr>
<td>Numerical methods for finance</td>
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<tr>
<td>- Actuarial science II</td>
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<tr>
<td>- Corporate finance</td>
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<tr>
<td>- Credit risk</td>
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**TOTAL ECTS:**

**TERM 3:** 30

**TERM 4:** 18

**TOTAL:** 48
CONTACTS

Please do not hesitate to contact us if you have any question or concern.

Aix-Marseille School of Economics
infoecole@amse-aixmarseille.fr
http://amse-feg.univ-amu.fr/