

# Curriculum Economics, track Economics

## First year

| <b>Mandatory Courses<sup>1</sup></b>        | Ects | Semester | Instructor(s) <sup>2</sup>                                         | Sector                  | Course code |
|---------------------------------------------|------|----------|--------------------------------------------------------------------|-------------------------|-------------|
| Game Theory and Microeconomics <sup>3</sup> | 9    | 1        | <a href="#">Domenico Menicucci</a>                                 | Secs-s/06               | B030704     |
| Mathematics for Economics <sup>4</sup>      | 9    | 1        | <a href="#">Antonio Villanacci</a>                                 | Secs-s/06               | B020834     |
| Statistical Inference                       | 6    | 1        | <a href="#">Alberto Cassese</a>                                    | Secs-s/01               | B020835     |
| Advanced Macroeconomics <sup>9,10</sup>     | 9    | 2        | <a href="#">Corrado Di Guilmi</a>                                  | Secs-p/01               | B030703     |
| Advanced Microeconomics <sup>8</sup>        | 6    | 2        | <a href="#">Annalisa Luporini</a>                                  | Secs-p/01               | B030705     |
| Corporate Governance and Financial Markets  | 6+6  | 2        | <a href="#">Sara De Masi</a> ,<br><a href="#">Nikolaos Kalyvas</a> | Secs-p/08,<br>Secs-p/11 | B035334     |

| <b>Choose one course from:</b> | Ects | Semester | Instructor(s)                    | Sector | Course code |
|--------------------------------|------|----------|----------------------------------|--------|-------------|
| Economic Law                   | 6    | 1        | <a href="#">Filippo Zatti</a>    | Ius/05 | B026830     |
| International Law              | 6    | 1        | <a href="#">Antonio Bultrini</a> | Ius/13 | B020837     |

## Second year

| <b>Mandatory Course</b>        | Ects | Semester | Instructor(s)                      | Sector    | Course code |
|--------------------------------|------|----------|------------------------------------|-----------|-------------|
| Political Economy <sup>5</sup> | 6    | 1        | <a href="#">Alessandro Gioffré</a> | Secs-p/01 | B030706     |

| <b>Choose two courses from:</b>  | Ects | Semester | Instructor(s)                       | Sector    | Course code |
|----------------------------------|------|----------|-------------------------------------|-----------|-------------|
| Behavioural and Social Evolution | 6    | 1        | <a href="#">Leonardo Boncinelli</a> | Secs-p/02 | B030709     |
| Macroeconometrics                | 6    | 1        | <a href="#">Gabriele Fiorentini</a> | Secs-p/05 | B031233     |
| Microeconometrics                | 6    | 1        | <a href="#">Alessandro Palandri</a> | Secs-p/05 | B016456     |

| <b>Choose one course from:</b> | Ects | Semester | Instructor(s)                       | Sector    | Course code |
|--------------------------------|------|----------|-------------------------------------|-----------|-------------|
| International Trade            | 6    | 1        | <a href="#">Giorgia Giovannetti</a> | Secs-p/01 | B026829     |
| Labour Economics and Gender    | 6    | 1        | <a href="#">Gianna Giannelli</a>    | Secs-p/02 | B031232     |
| Regulation and digital markets | 6    | 1        | <a href="#">Lapo Filistrucchi</a>   | Secs-p/03 | B033611     |
| Behavioural Economics          | 6    | 2        | <a href="#">Chiara Rapallini</a>    | Secs-p/03 | B026401     |
| Coding for Economists          | 6    | 2        | <a href="#">Domenico Colucci</a>    | Secs-s/06 | B035336     |
| Computational Economics        | 6    | 2        | <a href="#">Giorgio Ricchiuti</a>   | Secs-p/02 | B028630     |

| <b>Choose courses for 6 Ects from</b> | Ects | Semester | Instructor(s)                       | Course code |
|---------------------------------------|------|----------|-------------------------------------|-------------|
| R Lab                                 | 3    | 1        | <a href="#">Alberto Cassese</a>     | B034473     |
| Statistics Lab                        | 3    | 1        | <a href="#">Alberto Cassese</a>     | B033633     |
| Econometrics Lab                      | 6    | 2        | <a href="#">Alessandro Palandri</a> | B030722     |
| Economics Lab                         | 6    | 2        | <a href="#">Lapo Filistrucchi</a>   | B030723     |
| Stata Lab                             | 3    | 2        | <a href="#">Carla Rampichini</a>    | B034474     |
| Mathematics Laboratory                | 6    |          | <a href="#">Antonio Villanacci</a>  | B030714     |

| <b>Choose optional courses and/or internship (tirocinio) for at least 12 Ects. For instance<sup>6</sup></b> | Ects | Semester | Instructor(s)                       | Sector    | Course code |
|-------------------------------------------------------------------------------------------------------------|------|----------|-------------------------------------|-----------|-------------|
| Behavioural and Social Evolution                                                                            | 6    | 1        | <a href="#">Leonardo Boncinelli</a> | Secs-p/02 | B030709     |
| Computational Finance*                                                                                      | 6    | 1        | <a href="#">Lucio Geronazzo</a>     | Secs-s/06 | B019215     |
| Demography and Global Politics                                                                              | 6    | 1        | <a href="#">Gustavo De Santis</a>   | Secs-s/04 | B026819     |

<sup>1</sup> In a few cases, passing the exam of a course A is propaedeutic to passing the exam of a course B because the content of course A is helpful to understand the content of course B. If a student passes the exam of course B before passing the exam of course A, then the former exam will not appear in the student's career as passed until the student will have passed the latter exam. That may be important if the student needs to earn Ects for the purpose of a scholarship, for instance.

<sup>2</sup> Clicking on the instructor's name leads to the instructor's webpage at University of Firenze. Clicking on "Insegnamenti" on such page leads to the page of the courses given by the instructor.

<sup>3</sup> Passing the exam of Game Theory and Microeconomics is propaedeutic to passing the exam of Advanced Microeconomics. In terms of footnote 1, Game Theory and Microeconomics is course A, Advanced Microeconomics is course B.

<sup>4</sup> Passing the exam of Mathematics for Economics is propaedeutic to passing the exam of Advanced Macroeconomics.

<sup>5</sup> Passing the exam of Advanced Macroeconomics is propaedeutic to passing the exam of Political Economy.

<sup>6</sup> The courses to be inserted here can be any courses offered by the University of Firenze, provided the course content is consistent with the topics of the MSc Economics and Development. The courses in the list below are instances of courses which satisfy this condition.

|                                                                       |    |   |                                                                          |            |         |
|-----------------------------------------------------------------------|----|---|--------------------------------------------------------------------------|------------|---------|
| Economic History of Globalisation                                     | 6  | 1 | <a href="#">Francesco Ammannati, Valerio Cerretano</a>                   | Secs-p/12  | B019470 |
| Economic Law                                                          | 6  | 1 | <a href="#">Filippo Zatti</a>                                            | Ius/05     | B026830 |
| Elements of Policy Evaluation Methods                                 | 6  | 1 | <a href="#">Fiammetta Menchetti, Giulio Grossi</a>                       | Secs-s/01  | B030596 |
| Energy and Environmental Economics**                                  | 6  | 1 | <a href="#">Rossella Bardazzi, Maria Grazia Pazienza</a>                 | Secs-p/02  | B032669 |
| Energy, Environment and European Security                             | 9  | 1 | <a href="#">Rossella Bardazzi, Maria Grazia Pazienza, Alberto Tonini</a> | Secs-p/02  | B018922 |
| Environmental Economics and Policy**                                  | 6  | 1 | <a href="#">Stefano Clò</a>                                              | Secs-p/02  | B033542 |
| Fundamentals of Machine Learning***                                   | 6  | 1 | <a href="#">Bagdanov Andrew David</a>                                    | Ing-Inf/05 | B031360 |
| Health and Education Economics                                        | 6  | 1 | <a href="#">Lisa Grazzini</a>                                            | Secs-p/03  | B030721 |
| International Law                                                     | 6  | 1 | <a href="#">Antonio Bultrini</a>                                         | Ius/13     | B020837 |
| International Trade                                                   | 6  | 1 | <a href="#">Giorgia Giovannetti</a>                                      | Secs-p/01  | B026829 |
| Labour Economics and Gender                                           | 6  | 1 | <a href="#">Gianna Giannelli</a>                                         | Secs-p/02  | B031232 |
| Macroeconometrics                                                     | 6  | 1 | <a href="#">Gabriele Fiorentini</a>                                      | Secs-p/05  | B031233 |
| Microeconometrics                                                     | 6  | 1 | <a href="#">Alessandro Palandri</a>                                      | Secs-p/05  | B016456 |
| Policy Evaluation Methods                                             | 9  | 1 | <a href="#">Fiammetta Menchetti, Giulio Grossi</a>                       | Secs-s/01  | B029751 |
| Quantitative Finance and Derivatives                                  | 9  | 1 | <a href="#">Maria Elvira Mancino</a>                                     | Secs-s/06  | B019184 |
| Regulation and digital markets                                        | 6  | 1 | <a href="#">Lapo Filistrucchi</a>                                        | Secs-p/03  | B033611 |
| R Lab                                                                 | 3  | 1 | <a href="#">Alberto Cassese</a>                                          |            | B034473 |
| Statistics Lab                                                        | 3  | 1 | <a href="#">Alberto Cassese</a>                                          |            | B033633 |
| Behavioural Economics                                                 | 6  | 2 | <a href="#">Chiara Rapallini</a>                                         | Secs-p/03  | B026401 |
| Coding for Economists                                                 | 6  | 2 | <a href="#">Domenico Colucci</a>                                         | Secs-s/06  | B035336 |
| Computational Economics                                               | 6  | 2 | <a href="#">Giorgio Ricchiuti</a>                                        | Secs-p/02  | B028630 |
| Econometrics Lab                                                      | 6  | 2 | <a href="#">Alessandro Palandri</a>                                      |            | B030722 |
| Economic Demography                                                   | 6  | 2 | <a href="#">Gustavo De Santis</a>                                        | Secs-s/04  | B024216 |
| Economics Lab                                                         | 6  | 2 | <a href="#">Lapo Filistrucchi</a>                                        |            | B030723 |
| Economics of Innovation                                               | 6  | 2 | <a href="#">Annalisa Caloffi</a>                                         | Secs-p/06  | B033608 |
| History of Economic Thought                                           | 6  | 2 | <a href="#">Antonio Magliulo</a>                                         | Secs-p/04  | B020838 |
| Quantitative Risk Management*                                         | 6  | 2 | <a href="#">Giacomo Toscano</a>                                          | Secs-s/06  | B019125 |
| Stata Lab                                                             | 3  | 2 | <a href="#">Carla Rampichini</a>                                         |            | B034474 |
| Statistical Analysis of Network Data                                  | 6  | 2 | <a href="#">Maria Francesca Marino</a>                                   | Secs-s/01  | B031115 |
| Statistical Learning for Data Science***                              | 6  | 2 | <a href="#">Anna Gottard</a>                                             | Secs-s/01  | B032456 |
| Statistical Information Systems: Big Data, Open Data and Semantic Web | 6  | 2 | <a href="#">Cristina Martelli</a>                                        | Secs-s/03  | B025419 |
| Mathematics Laboratory                                                | 6  |   | <a href="#">Antonio Villanacci</a>                                       |            | B030714 |
| Tirocinio                                                             | 3  |   |                                                                          |            | B033547 |
| Tirocinio                                                             | 6  |   |                                                                          |            | B004980 |
| Tirocinio Magistrale                                                  | 9  |   |                                                                          |            | B005677 |
| Tirocinio                                                             | 12 |   |                                                                          |            | B033539 |

|        |         |
|--------|---------|
| Thesis | 21 Ects |
|--------|---------|

\* The courses Computational Finance and Quantitative Risk Management are useful for students interested in acquiring a specialization in finance.

\*\* The courses Energy and Environmental Economics and Environmental Economics and Policy are useful for students interested in acquiring a specialization in environmental economics and energy economics.

\*\*\* The courses Fundamentals of Machine Learning and Statistical Learning for Data Science are useful for students interested in statistics for machine learning.