

# Economics (BA/BS)

Do longer prison sentences lower crime rates? Does socialized medicine improve health outcomes? Do lower taxes pay for themselves? Economics affords the intellectual architecture needed to systematically address these types of questions. The economics discipline provides a rigorous framework for modeling how individuals and institutions make decisions, how these decisions shape our society, and how laws and policies can be designed to improve outcomes. This framework is implemented through advanced quantitative analysis, including statistical methods and data science, and can be used, quite simply, to change the world.

An economics degree indicates proficiency in data analysis, the modeling of behavioral patterns, the analysis of business practices, and the assessment of policy issues and challenges. Equipped with problem solving and analytical reasoning skills, undergraduate students in economics pursue careers in business, finance, data-science, law, government and many other paths, as well as advanced degrees in business, economics, law and public affairs. Economics majors also have the opportunity to complete a master's degree in economics (<https://economics.uoregon.edu/masters/>) in just one additional year following their undergraduate studies.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Be proficient in basic microeconomic and macroeconomic concepts.
- Be proficient in microeconomic analysis.
- Be proficient in macroeconomic analysis.
- Use economic data to examine empirical evidence of hypothesized relationships through statistical/econometric techniques.
- Apply the knowledge outlined in goals 1) through 4) to particular issues across various fields in economics.

### Learning Outcome Explanations:

- Proficiency in basic microeconomic and macroeconomic concepts.
- Proficiency in microeconomic analysis. This builds on the microeconomic knowledge required in educational goal 1) and requires the ability to examine models of agents' decisions, including consumer utility maximization and firm profit maximization, using mathematical tools.
- Proficiency in macroeconomic analysis. This builds on the macroeconomic knowledge required in educational goal 1) and requires knowledge of theoretical models that explain fluctuations in output, employment, the price level, inflation, interest rates, and other macroeconomic variables, as well as the effect of monetary and fiscal policies on these macroeconomic outcomes.
- The ability to use economic data to examine empirical evidence of hypothesized relationships through basic statistical/econometric techniques.
- The ability to apply the knowledge outlined in goals 1) through 4) to particular issues across various fields in economics which may include, for example, environmental, international, labor, or urban economics.

## Economics Major Requirements

| Code                                                                                   | Title                                                                                                                                                                                                                           | Credits   |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| EC 201<br>& EC 202                                                                     | Introduction to Economic Analysis: Microeconomics and Introduction to Economic Analysis: Macroeconomics <sup>1</sup>                                                                                                            | 8         |
| MATH 241<br>or MATH 251<br>or MATH 261                                                 | Calculus for Business and Social Science I <sup>1</sup><br>Calculus I<br>Calculus with Theory I                                                                                                                                 | 4         |
| MATH 242<br>or MATH 252                                                                | Calculus for Business and Social Science II <sup>1</sup><br>Calculus II                                                                                                                                                         | 4         |
| STAT 243Z<br>or DSCI 102<br>or DSCI 345M<br>or MATH 343<br>or MATH 345M<br>or MATH 425 | Elementary Statistics I <sup>1</sup><br>Foundations of Data Science II<br>Probability and Statistics for Data Science<br>Statistical Models and Methods<br>Probability and Statistics for Data Science<br>Statistical Methods I | 4         |
| EC 311<br>& EC 313                                                                     | Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory <sup>2,3,4</sup>                                                                                                                                        | 8         |
| EC 320<br>& EC 421<br>or EC 423–<br>424                                                | Introduction to Econometrics I and Introduction to Econometrics II <sup>2,3</sup><br>Econometrics                                                                                                                               | 8         |
| Economics courses numbered 300 or above <sup>3,5</sup>                                 |                                                                                                                                                                                                                                 | 28        |
| <b>Total Credits</b>                                                                   |                                                                                                                                                                                                                                 | <b>64</b> |

<sup>1</sup> Should be completed by the end of the sophomore year.

<sup>2</sup> Should be completed by the end of the junior year.

<sup>3</sup> At least 28 of the 44 required upper-division credits required for the major (i.e., EC 311 Intermediate Microeconomic Theory, EC 313 Intermediate Macroeconomic Theory, EC 320 Introduction to Econometrics I, EC 421 Introduction to Econometrics II, and the 28 required field course credits) must be taken at the University of Oregon

<sup>4</sup> Students cannot receive credit for both EC 311 and FIN 311.

<sup>5</sup> At least 20 credits in courses numbered 400 or above. No more than 8 of the 28 credits may be in courses numbered 401, 404, 405, 407, 408 or CAS 417; no more than 2 credits in course numbered 407 may count toward the 8 of the 28 credits.

Grades of C– or better in courses taken to satisfy major requirements.

## Courses Offered Pass/No Pass Only

| Code   | Title                           | Credits |
|--------|---------------------------------|---------|
| EC 401 | Research: [Topic]               | 1-21    |
| EC 404 | Internship                      | 1-4     |
| EC 405 | Reading and Conference: [Topic] | 1-21    |
| EC 408 | Workshop: [Topic]               | 1-21    |

EC 320 Introduction to Econometrics I (or EC 423 Econometrics) is a prerequisite for almost all 400-level courses. EC 311 Intermediate Microeconomic Theory and sometimes EC 313 Intermediate Macroeconomic Theory are as well. Because MATH 242 Calculus for Business and Social Science II and Elementary Statistics I (STAT 243Z) are prerequisites for EC 320 Introduction to Econometrics I, it is important

for students to take those courses early. See the course listings for details on prerequisites.

Departmental Honors

Qualified students may apply to graduate with honors in economics. Two requirements must be met:

- 1. Completion of upper-division economics courses with at least a 3.50 grade point average
- 2. Completion of a research paper, written under the guidance of a faculty member, for 4 credits in EC 401 Research: [Topic]. A copy of the completed paper, approved by the faculty advisor, must be presented to the department by Friday of the week before final examinations during the term the student plans to graduate

Students interested in honors also should consider taking EC 418 Economic Analysis of Community Issues I and EC 419 Economic Analysis of Community Issues II. Instructor approval is required for EC 418–419. Students who intend to satisfy these requirements should notify the director of undergraduate studies early in the term in which they intend to graduate.

Four-Year Degree Plan

The degree plan shown is only a sample of how students may complete their degrees in four years. There are alternative ways. Students should consult their advisor to determine the best path for them.

Bachelor of Arts in Economics

| Course                                             | Title                                                    | Credits               | Milestones                |
|----------------------------------------------------|----------------------------------------------------------|-----------------------|---------------------------|
| First Year                                         |                                                          |                       |                           |
| Fall                                               |                                                          |                       |                           |
| MATH 111Z                                          | Precalculus I: Functions                                 | math placement test   | 4                         |
| WR 121Z                                            | Composition I                                            |                       | 4                         |
| General-education course in social science         |                                                          |                       | 4                         |
| First term of first-year second-language sequence  |                                                          |                       | Language placement test 5 |
| Credits                                            |                                                          |                       | 17                        |
| Winter                                             |                                                          |                       |                           |
| EC 201                                             | Introduction to Economic Analysis: Microeconomics        |                       | 4                         |
| MATH 241 or MATH 251                               | Calculus for Business and Social Science I or Calculus I |                       | 4                         |
| General-education course in social science         |                                                          |                       | 4                         |
| Second term of first-year second-language sequence |                                                          |                       | 5                         |
| Credits                                            |                                                          |                       | 17                        |
| Spring                                             |                                                          |                       |                           |
| WR 122Z or WR 123                                  | Composition II or College Composition III                | Complete writing req  | 4                         |
| EC 202                                             | Introduction to Economic Analysis: Macroeconomics        | EC 201 & 202 complete | 4                         |

|                                                   |                                                            |    |
|---------------------------------------------------|------------------------------------------------------------|----|
| MATH 242 or MATH 252                              | Calculus for Business and Social Science II or Calculus II | 4  |
| Third term of first-year second-language sequence |                                                            | 5  |
| Credits                                           |                                                            | 17 |
| Total Credits                                     |                                                            | 51 |

| Course                                              | Title                             | Credits | Milestones |
|-----------------------------------------------------|-----------------------------------|---------|------------|
| Second Year                                         |                                   |         |            |
| Fall                                                |                                   |         |            |
| STAT 243Z                                           | Elementary Statistics I           |         | 4          |
| EC 311                                              | Intermediate Microeconomic Theory |         | 4          |
| General-education course in social science          |                                   |         | 4          |
| First term of second-year second-language sequence  |                                   |         | 5          |
| Credits                                             |                                   |         | 17         |
| Winter                                              |                                   |         |            |
| EC 313                                              | Intermediate Macroeconomic Theory |         | 4          |
| General-education course in science                 |                                   |         | 4          |
| Multicultural course                                |                                   |         | 4          |
| Second term of second-year second-language sequence |                                   |         | 5          |
| Credits                                             |                                   |         | 17         |

|                                                    |                                |                             |    |
|----------------------------------------------------|--------------------------------|-----------------------------|----|
| Spring                                             |                                |                             |    |
| EC 320                                             | Introduction to Econometrics I | EC 311, 313, & 320 complete | 4  |
| General-education course in arts and letters       |                                |                             | 4  |
| Multicultural course                               |                                |                             | 4  |
| Third term of second-year second-language sequence |                                |                             | 5  |
| Credits                                            |                                |                             | 17 |
| Total Credits                                      |                                |                             | 51 |

| Course                                      | Title                           | Credits | Milestones |
|---------------------------------------------|---------------------------------|---------|------------|
| Third Year                                  |                                 |         |            |
| Fall                                        |                                 |         |            |
| Upper-division EC course                    |                                 |         | 4          |
| Group-satisfying course in arts and letters |                                 |         | 4          |
| Elective courses                            |                                 |         | 8          |
| Credits                                     |                                 |         | 16         |
| Winter                                      |                                 |         |            |
| EC 421                                      | Introduction to Econometrics II |         | 4          |
| Upper-division EC course                    |                                 |         | 4          |
| Group-satisfying course in arts and letters |                                 |         | 4          |
| Elective course                             |                                 |         | 4          |
| Credits                                     |                                 |         | 16         |

|                                             |  |  |    |
|---------------------------------------------|--|--|----|
| Spring                                      |  |  |    |
| Upper-division EC course                    |  |  | 4  |
| Group-satisfying course in arts and letters |  |  | 4  |
| Elective courses                            |  |  | 8  |
| Credits                                     |  |  | 16 |
| Total Credits                               |  |  | 48 |

| Course                    | Title | Credits | Milestones                                   | General-education course in social science | 4                              |   |
|---------------------------|-------|---------|----------------------------------------------|--------------------------------------------|--------------------------------|---|
| Fourth Year               |       |         |                                              | General-education course in science        | 4                              |   |
| Fall                      |       |         |                                              | Credits                                    | 16                             |   |
| Upper-division EC course  |       | 4       | Winter                                       |                                            |                                |   |
| Elective courses          |       | 8       | EC 313                                       | Intermediate Macroeconomic Theory          | 4                              |   |
| Credits                   |       | 12      | General-education course in arts and letters |                                            | 4                              |   |
| Winter                    |       |         |                                              | General-education course in science        | 4                              |   |
| Upper-division EC courses |       | 8       | Multicultural course                         |                                            | 4                              |   |
| Elective courses          |       | 4       | Credits                                      |                                            | 16                             |   |
| Credits                   |       | 12      | Spring                                       |                                            |                                |   |
| Spring                    |       |         |                                              | EC 320                                     | Introduction to Econometrics I | 4 |
| Upper-division EC course  |       | 4       | General-education course in science          |                                            | 4                              |   |
| Elective courses          |       | 8       | Elective courses                             |                                            | 8                              |   |
| Credits                   |       | 12      | Credits                                      |                                            | 16                             |   |
| Total Credits             |       | 36      | Total Credits                                |                                            | 48                             |   |

## Bachelor of Science in Economics

| Course                                       | Title                                             | Credits   | Milestones |
|----------------------------------------------|---------------------------------------------------|-----------|------------|
| <b>First Year</b>                            |                                                   |           |            |
| <b>Fall</b>                                  |                                                   |           |            |
| BA 101Z                                      | Introduction to Business                          | 4         |            |
| MATH 111Z                                    | Precalculus I: Functions                          | 4         |            |
| or                                           | or Precalculus II: Trigonometry                   |           |            |
| MATH 112Z                                    |                                                   |           |            |
| WR 121Z                                      | Composition I                                     | 4         |            |
| General-education course in arts and letters |                                                   | 4         |            |
| <b>Credits</b>                               |                                                   | <b>16</b> |            |
| <b>Winter</b>                                |                                                   |           |            |
| EC 201                                       | Introduction to Economic Analysis: Microeconomics | 4         |            |
| MATH 241                                     | Calculus for Business and Social Science I        | 4         |            |
| or                                           | or Calculus I                                     |           |            |
| MATH 251                                     |                                                   |           |            |
| General-education course in arts and letters |                                                   | 4         |            |
| General-education course in social science   |                                                   | 4         |            |
| <b>Credits</b>                               |                                                   | <b>16</b> |            |
| <b>Spring</b>                                |                                                   |           |            |
| WR 122Z                                      | Composition II                                    | 4         |            |
| or WR 123                                    | or College Composition III                        |           |            |
| EC 202                                       | Introduction to Economic Analysis: Macroeconomics | 4         |            |
| MATH 242                                     | Calculus for Business and Social Science II       | 4         |            |
| or                                           | or Calculus II                                    |           |            |
| MATH 252                                     |                                                   |           |            |
| General-education course in arts and letters |                                                   | 4         |            |
| <b>Credits</b>                               |                                                   | <b>16</b> |            |
| <b>Total Credits</b>                         |                                                   | <b>48</b> |            |
| <b>Second Year</b>                           |                                                   |           |            |
| <b>Fall</b>                                  |                                                   |           |            |
| STAT 243Z                                    | Elementary Statistics I                           | 4         |            |
| EC 311                                       | Intermediate Microeconomic Theory                 | 4         |            |

| Course                            | Title                           | Credits   | Milestones |
|-----------------------------------|---------------------------------|-----------|------------|
| <b>Third Year</b>                 |                                 |           |            |
| <b>Fall</b>                       |                                 |           |            |
| Upper-division EC course          |                                 | 4         |            |
| Elective courses                  |                                 | 8         |            |
| Multicultural course              |                                 | 4         |            |
| <b>Credits</b>                    |                                 | <b>16</b> |            |
| <b>Winter</b>                     |                                 |           |            |
| EC 421                            | Introduction to Econometrics II | 4         |            |
| Upper-division EC course          |                                 | 4         |            |
| Elective courses                  |                                 | 8         |            |
| <b>Credits</b>                    |                                 | <b>16</b> |            |
| <b>Spring</b>                     |                                 |           |            |
| Upper-division EC course          |                                 | 4         |            |
| Elective courses                  |                                 | 12        |            |
| <b>Credits</b>                    |                                 | <b>16</b> |            |
| <b>Total Credits</b>              |                                 | <b>48</b> |            |
| <b>Fourth Year</b>                |                                 |           |            |
| <b>Fall</b>                       |                                 |           |            |
| Upper-division elective EC course |                                 | 4         |            |
| Elective courses                  |                                 | 8         |            |
| <b>Credits</b>                    |                                 | <b>12</b> |            |
| <b>Winter</b>                     |                                 |           |            |
| Upper-division EC courses         |                                 | 8         |            |
| Elective courses                  |                                 | 4         |            |
| <b>Credits</b>                    |                                 | <b>12</b> |            |
| <b>Spring</b>                     |                                 |           |            |
| Upper-division EC course          |                                 | 4         |            |
| Elective courses                  |                                 | 8         |            |
| <b>Credits</b>                    |                                 | <b>12</b> |            |
| <b>Total Credits</b>              |                                 | <b>36</b> |            |