Economics BS

Nearly every decision a person, business, or government makes involves trade-offs and can fall under the purview of economic analysis. In coursework for the Economics BS, students develop analytical and quantitative skills and apply their knowledge to a range of topics such as economic modeling, financial markets, and market analysis. Students also study the economy as a whole and analyze the sources of growth, recessions, and inflation, as well as government policies. The study of economics is an excellent way to learn how to apply analytical and quantitative skills to a range of interesting economic problems.

General Education Requirements

All undergraduate economics majors must meet the university and college general education requirements. Candidates for the B.A. degree may take any foreign language to meet this requirement. Candidates for the B.S. degree take mathematics and quantitative courses instead of the foreign language requirement. Courses in economics may be used to meet the university social sciences requirement.

Satisfactory/Unsatisfactory Option

Courses outside the major field and ECON 1001, Principles of Microeconomics, and ECON 1002, Principles of Macroeconomics, may be taken on a satisfactory/unsatisfactory basis.

Prerequisites

All prerequisites for economics courses must be completed with a C- or better.

Degree Requirements

Candidates for the B.S. degree must complete at least 36, but no more than 50, hours in economics. At least 30 hours must be at or above the 2000 level. All core courses for the major must be completed with a grade of C- or better.

The following core courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1001</td>
<td>Principles of Microeconomics (MOTR ECON 102)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1002</td>
<td>Principles of Macroeconomics (MOTR ECON 101)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3001</td>
<td>Intermediate Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3002</td>
<td>Intermediate Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 3100</td>
<td>Economic Data and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4100</td>
<td>Introduction to Econometrics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1800</td>
<td>Analytic Geometry and Calculus I (strongly recommended)</td>
<td>3-5</td>
</tr>
<tr>
<td>or MATH 1100</td>
<td>Basic Calculus</td>
<td></td>
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</tbody>
</table>

Select two of the following quantitative courses: 6-8

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECON 4030</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>ECON 4040</td>
<td>Booms and Busts in the Economy: Data and Theory</td>
</tr>
<tr>
<td>ECON 4110</td>
<td>Applied Econometrics</td>
</tr>
<tr>
<td>ECON 4120</td>
<td>Time Series Econometrics for Economics and Finance</td>
</tr>
<tr>
<td>ECON 4130</td>
<td>Business and Economic Forecasting</td>
</tr>
<tr>
<td>ECON 4150</td>
<td>Mathematical Economics</td>
</tr>
</tbody>
</table>

ECON 4160 Geospatial Analysis in the Social Sciences
ECON 4170 Fundamentals of Cost-Benefit Analysis

Mathematics courses numbered 1900 or above with consent of advisor ¹

¹ Note: mathematics courses used for this requirement do not count towards the 36 hours in economics requirement.

Departmental Honors

A student may earn departmental honors with a GPA of 3.6 in economics and the recommendation of the department.

Complementary Areas of Study

The department encourages all majors to develop breadth in related disciplines. Course work and minors are available in a number of areas such as business administration, computer science, statistics, and political science. In addition, courses offered by the department are required for the B.S. in Actuarial Science and help satisfy the prerequisites for courses required for the Certificate in Actuarial Studies and have been approved by the Society of Actuaries (SOA) to satisfy the VEE requirements in Economics. Students should check with their advisers for recommendations concerning courses in these areas. The department suggests the following supplemental course work for students interested in pursuing doctoral-level graduate work in economics or careers in general business. It also encourages all students to obtain work experience by enrolling in the Internship in Applied Economics (ECON 4990).

Graduate School Preparation

It is recommended that students considering doctoral-level graduate work in economics also take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 1900</td>
<td>Analytic Geometry and Calculus II</td>
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</tr>
<tr>
<td>MATH 2000</td>
<td>Analytic Geometry and Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 2020</td>
<td>Introduction to Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2450</td>
<td>Elementary Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4100</td>
<td>Real Analysis I</td>
<td>3</td>
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<tr>
<td>MATH 4200</td>
<td>Mathematical Statistics I</td>
<td>3</td>
</tr>
</tbody>
</table>

Learning Outcomes

- Use economic reasoning to interpret and evaluate social, political and economic arguments, and policies.
- Use mathematical methods to construct and analyze economic models and to analyze and interpret economic phenomena.
- Understand key market institutions such as property rights and contracts and economic organizations such as the Federal Reserve System and the International Monetary Fund and apply this knowledge to analyze economic behavior and evaluate public policy.
- Identify the causes and consequences of poverty and prosperity across and within societies.
- Predict changes in key macroeconomic variables in response to changes in social, political, and economic policy as well as non-economic events such as terrorist attacks, natural disasters, and changes in consumer confidence.
• Estimate, analyze, and interpret economic relationships using appropriate regression analysis techniques applied to economic data for use in business and policy applications.

• Write a research paper that employs sound economic reasoning and economic data that demonstrates the ability to model and interpret regression analysis of an economic relationship.

## Sample Four Year Plan

### First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTDSC 1003</td>
<td>1</td>
<td>ECON 1001</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1100</td>
<td>3</td>
<td>MATH 1800 or 1100</td>
<td>5</td>
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<tr>
<td>MATH 1045</td>
<td>5</td>
<td>EXPLORE – Humanities and Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>CORE – Communication Proficiency</td>
<td>3</td>
<td>CORE – Information Literacy</td>
<td>3</td>
</tr>
<tr>
<td>EXPLORE – Humanities &amp; Fine Arts</td>
<td>3</td>
<td>EXPLORE - Social Sciences</td>
<td>3</td>
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<td></td>
<td>15</td>
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<td>17</td>
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### Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1002</td>
<td>3</td>
<td>ECON 3001</td>
<td>3</td>
</tr>
<tr>
<td>CORE – US History &amp; Government</td>
<td>3</td>
<td>ECON 2000+ course</td>
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<tr>
<td>EXPLORE – Math &amp; Natural Sciences</td>
<td>3</td>
<td>Elective or minor</td>
<td>3</td>
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<tr>
<td>EXPLORE – Humanities &amp; Fine Arts</td>
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<td>Elective or minor</td>
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<tr>
<td>Cultural Diversity Requirement</td>
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### Third Year

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<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON 3100</td>
<td>3</td>
<td>ECON 4100</td>
<td>4</td>
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<tr>
<td>ECON 3002</td>
<td>3</td>
<td>ECON 2000+ course</td>
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<tr>
<td>ENGL 3100</td>
<td>3</td>
<td>Elective or minor</td>
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<td>Elective or minor</td>
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<td>15</td>
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### Fourth Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECON 4XXX quantitative course</td>
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<td>ECON 4XXX quantitative course</td>
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<tr>
<td>ECON 2000+ level course</td>
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<tr>
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</table>

**Total Hours: 120**

1 INTDSC 1003 is required only for first-time freshmen and transfer students with less than 26 college credits.

*Please Note: This plan is an example of what a four year plan could look like for a typical student. Placement exam scores in math as well as the completion of coursework may change the plan. It should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor each semester. All requirements are subject to change.*