Economics Major: Concentrations

Economics - B.S.
Public Administration Concentration

This program will prepare students for careers in the public sector at either the local, state or federal level, as well as for graduate studies.

Required Economics Courses:
- ECN101 Principles of Microeconomics* 3 credits
- ECN102 Principles of Macroeconomics 3 credits
- ECN 270 Intermediate Macro 3 credits
- ECN 280 Managerial Economics 3 credits
- Economics Electives at the 300-level or higher 15 credits
  Total 27 credits

Required Math/Statistics Sequence: 10-11 credits
- MAT108 Finite Math 3 credits
- MAT181 Applied Calculus or
  MAT211 Calculus I 3-4 credits
- MAT117 Applied Statistics or
  MAT217 Statistics I 4 credits

Required Public Administration Courses: 18 credits
- PLS100 US Government and Politics 3 credits
- PLS271 Introduction to Public Administration 3 credits
- PLS300 Advanced US Government:
  Institutions and Public Policy 3 credits
- PLS371 Public Management or
  PLS373 Public Financial Administration 3 credits

Plus three additional Public Administrative credits from among the following:
- PLS 231 State and Local Government
- PLS371 Public Management
- PLS372 Public Personnel Administration
- PLS374 Public Service Ethics

Plus three additional political science or public administrative credits to fulfill the requirements for the minor.

*Students taking Principles of Economics (4 credits) should not take Principles of Microeconomics or Macroeconomics. Only six hours of Principles credits will count toward the 27 required credit hours in Economics.
Economics - B.S.
Business Concentration.

This concentration combines a solid background in economics with a significant exposure to important business-related analytical and conceptual skills. By completing the business minor students, will gain an appreciation for managerial decision making and develop an awareness of how business skills are applied.

**Required Economics Courses:**
- ECN101 Principles of Microeconomics* 3 credits
- ECN102 Principles of Macroeconomics 3 credits
- ECN 270 Intermediate Macroeconomics 3 credits
- ECN 280 Managerial Economics 3 credits
- Economics Electives at the 300 level or above 15 credits
  Total 27 credits

**Required Mathematical/Statistics (9-11 credits)**
- MAT108 Finite Math 3 credits
- MAT181 Applied Calculus or MAT211 Calculus I 3-4 credits
- MAT110 Applied Statistics (3 credits) or MAT217 Statistics I (4 credits) or SCM200 Statistical Applications in Business 3-4 credits

**Required Business Courses (18 credits)**
- ACC200 Fundamentals of Accounting 3 credits
- FIN311 Financial Management 3 credits
- MGT305 Organizational Behavior 3 credits
- MKT305 Principles of Marketing 3 credits

Plus three credits from either a finance or accounting course, and three additional College of Business credits. Students will have completed the required 18 credits for the business minor.

*Students taking Principles of Economics (4 credits) should not take Principles of Microeconomics or Macroeconomics. Only six hours of Principles credits will count toward the 27 required credit hours in Economics.

** Requires ISM142 Business Computer Systems (3 credits) as a prerequisite.
Economics - B.S.
Political Science Concentration

This combination will be appropriate for students planning to pursue careers in government, business, law, or international relations. While combining some aspects of a traditional political economy approach, this concentration will also heighten students’ knowledge of the institutional and legal dimensions of major public policy debates.

Required Economics Courses:

- ECN101 Principles of Microeconomics* 3 credits
- ECN102 Principles of Macroeconomics 3 credits
- ECN 270 Intermediate Macroeconomics 3 credits
- ECN 280 Managerial Economics 3 credits
- Economics Electives at the 300-level or higher 15 credits
  Total 27 credits

Required Math/Statistics Sequence: 10-11 credits

- MAT108 Finite Math 3 credits
- MAT181 Applied Calculus **or** MAT211 Calculus I 3-4 credits
- MAT117 Applied Statistics or MAT217 3-4 credits

Required Political Science Courses: 18 credits

- PLS100 U.S. Government and Politics
- PLS201 Introduction to Political Science
- PLS300 Advanced U.S. Government: Institution of Public Policy
- PLS301 Political Science Research Methods **or** PLS302 Public Policy
  Plus six additional political science credits, three of which must be at the 300-level or higher.

*Students taking Principles of Economics (4 credits) should not take Principles of Microeconomics or Macroeconomics. Only six hours of Principles credits will count toward the 27 required credit hours in Economics.
Economics - B.S.  
Mathematics Concentration

This concentration would be especially well-suited for students preparing for graduate study in economics, which has become increasingly focused upon mathematics and statistical analysis. They are encouraged to take Mathematical Economics and Econometrics.

**Required Economics Courses:**
- ECN101 Principles of Microeconomics* 3 credits
- ECN102 Principles of Macroeconomics 3 credits
- ECN 270 Intermediate Macroeconomics 3 credits
- ECN 280 Managerial Economics 3 credits
- Economics Electives at the 300-level or higher 15 credits
- **Total** 27 credits

**Required Math/Statistics Courses:**
- MAT211 Calculus I 4 credits
- MAT212 Calculus II 4 credits
- MAT 217 Applied Statistics 4 credits
- **Total** 21 credits

Plus three additional mathematics courses from among the following. Other mathematics courses at the 200-level or above may be substituted, with advisement. At least one of these additional courses must be at the 300-level.

- MAT213 Multivariate Calculus
- MAT225 Discrete Math
- MAT322 Differential Equations
- MAT329 Elementary Linear Algebra
- MAT317 Statistics II
- MAT428 Linear Algebra

*Students taking Principles of Economics (4 credits) should not take Principles of Microeconomics or Macroeconomics. Only six hours of Principles credits will count toward the 27 required credit hours in Economics.*
Intended for students pursuing a broad based approach to understanding contemporary social issues, the social science concentration would be similar to the now defunct B.A. in Economics, though without the foreign language requirement. Students are encouraged to consider studying a foreign language as a purposeful use of some of their free elective credits.

**Required Economics Courses (27 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 101</td>
<td>Principles of Macroeconomics*</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECN 102</td>
<td>Principles of Microeconomics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECN 270</td>
<td>Intermediate Macroeconomics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECN 280</td>
<td>Managerial Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>Economics Electives at the 300-level or higher</td>
<td>15 credits</td>
</tr>
</tbody>
</table>

**Mathematics Sequence (10-11 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 108</td>
<td>Finite Math or MAT 124 Pre-Calculus</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 181</td>
<td>Applied Calculus or MAT 211 Calculus I</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>MAT 117</td>
<td>Applied Statistics or MAT 217 Statistics I</td>
<td>3-4 credits</td>
</tr>
</tbody>
</table>

**Allied Fields (18 credits)**

Students concentrating in the social sciences must take the following courses and credits in the appropriate allied fields.

**Political Science**

- PLS 100 
  - Political Science elective at the 300-level or higher, with advisement

**Sociology or Anthropology**

- SOC 101 
  - Introduction to Sociology: Society & Diversity or ANT111 Cultural Anthropology
  
  Plus a 300-level elective in either disciplines selected, with advisement

**Geography, History or Philosophy**

- Two courses from one of these disciplines inclusive of a 300-level elective selected, with advisement

*Students taking Principles of Economics (4 credits) should not take Principles of Microeconomics or Macroeconomics. Only six hours of Principles credits will count toward the 27 required credit hours in Economics.*
**B.S. Economics**

**Data Science Concentration**

This concentration is designed for students who want to leverage their knowledge of economic theory to the area of data analysis. There is a high demand for employees that can query, manipulate, and analyze data.

**Required Economics Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 101 Principles of Macroeconomics*</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECO 102 Principles of Microeconomics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECO 270 Intermediate Macroeconomics</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECO 280 Managerial Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td>Economics Electives at the 300-level or higher</td>
<td><strong>15 credits</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27 credits</strong></td>
</tr>
</tbody>
</table>

**Required Math Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 140A or 140B College Algebra</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>MAT 181 Applied Calculus</td>
<td>3 credits</td>
</tr>
<tr>
<td>Or</td>
<td></td>
</tr>
<tr>
<td>MAT 211 Calculus I</td>
<td><strong>4 credits</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4-7 credits</strong></td>
</tr>
</tbody>
</table>

**Data Science Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 104 Programming with Python or</td>
<td>3-4 credits</td>
</tr>
<tr>
<td>CSC 110 Computer Science I or</td>
<td></td>
</tr>
<tr>
<td>MIS 240 Intro. To Programming Concepts</td>
<td></td>
</tr>
<tr>
<td>MAT 217 Statistics I</td>
<td>4 credits</td>
</tr>
<tr>
<td>MAT 317 Statistics II</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 219 Data Science I</td>
<td>3 credits</td>
</tr>
<tr>
<td>MAT 319 Data Science II</td>
<td>3 credits</td>
</tr>
<tr>
<td>ECO 333 Research and Analysis in Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19-20 credits</strong></td>
</tr>
</tbody>
</table>

*Students taking Principles of Economics (4 credits) should not take Principles of Microeconomics or Macroeconomics. Only six hours of Principles credits will counts toward the 27 required credit hours in Economics.

October 12, 2017