

# B.A. IN ECONOMICS

## Undergraduate Research

The department of economics offers students the opportunity to gain research experience under faculty guidance. Research topics can be theoretical analysis, empirical analysis or both. Further options regarding the level of research are available, as the department offers junior- and senior-level courses - ECON 3900, ECON 3910, ECON 4910 and ECON 4920. A student interested in conducting research needs to register for one of those four courses with the consent of a faculty member who agrees to direct the student's research. Students may enroll in these courses more than once. If they do, however, they are encouraged to work with different faculty members to obtain more diverse research experiences. The department also has available undergraduate research grants from the Shapiro scholarship fund. Please see the department undergraduate advisor for more information.

- B.A. in Economics (p. 1)
- Economics -Concentration In Data Analytics In Economics, BA (p. 1)
- Economics- Concentration In Environmental Economics, BA (p. 2)

## B.A. IN ECONOMICS

The requirement of 30 hours in economics must include, from among the following, 15 hours of core courses and 15 hours of electives including at least one WAC course in Economics.

In the major area, 21 hours are to be taken under the regular grading system; the P/NC option is available for the remaining 9 hours and for all related courses.

Economics majors are required to take the following courses:

Code	Title	Hours
<b>Core Courses</b>		
ECON 1150	Principles Of Macroeconomics	3
or ECON 1155	Principles of Macroeconomics with Data Applications	
ECON 1200	Principles Of Microeconomics	3
ECON 2810	Introduction to Econometrics	3
ECON 3150	Intermediate Macroeconomic Theory	3
ECON 3200	Intermediate Micro-Economic Theory	3
<b>Economics Electives</b>		
Select 15 hours, chosen in consultation with the Economics Advisor		15
<b>Related Courses</b> <sup>1</sup>		
MATH 1850	Single Variable Calculus I (or equivalent) <sup>1</sup>	4-5
or MATH 1730	Calculus with Applications to Business and Finance	
MATH 2600	Introduction To Statistics (or equivalent)	3
or BUAD 2060	Business Statistics	
<b>Total Hours</b>		<b>37-38</b>

<sup>1</sup> Majors are encouraged to meet the mathematics and statistics requirements at an early stage of their course work. Students must meet those requirements by choosing one calculus and one statistics

course. Majors are encouraged to meet the mathematics and statistics requirements at an early stage of their coursework. For the calculus requirement, students may be exempted from this prescribed requirement through the successful completion of ECON 4300. Students who earn credit for ECON 4300 as a major elective will have the calculus requirement in the related fields waived and they may complete the required 18 credits with any electives from the published course list in the degree audit.

## Economics -concentration in Data Analytics in Economics, BA

The requirement of 30 hours in economics must include, from among the following, 15 hours of core courses, 3 hours of electives including one WAC course in Economics, and 12 hours of concentration courses.

In the major area, 21 hours are to be taken under the regular grading system; the P/NC option is available for the remaining 9 hours and for all related courses.

Economics majors are required to take the following courses:

Code	Title	Hours
<b>Core Courses</b>		
ECON 1150	Principles Of Macroeconomics	3
ECON 1200	Principles Of Microeconomics	3
ECON 2810	Introduction to Econometrics	3
ECON 3150	Intermediate Macroeconomic Theory	3
ECON 3200	Intermediate Micro-Economic Theory	3
<b>Electives</b>		
Select 3 hours, chosen in consultation with the Economics Advisor		3
<b>Optional Concentration in Data Analytics in Economics</b>		
To earn the concentration in data analytics in economics, students must complete 12 credits from the following elective courses as part of their major:		12
DANN 2000	Proseminar in Data Analytics I	
DANN 4000	Proseminar in Data Analytics II	
ECON 3810	Applied Econometrics	
ECON 4810	Econometrics Models And Methods I	
ECON 4820	Econometrics Models And Methods II	
OR a substitution of one 3/4000 economics elective that includes a required data analysis component chosen in consultation with the economics undergraduate advisor.		
<b>Related Courses</b> <sup>1</sup>		
MATH 1850	Single Variable Calculus I (or equivalent)	
or MATH 1730	Calculus with Applications to Business and Finance	
MATH 2600	Introduction To Statistics (or equivalent)	
or BUAD 2060	Business Statistics	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Majors are encouraged to meet the mathematics and statistics requirements at an early stage of their course work. Students must meet those requirements by choosing one calculus and one statistics course.

## Economics- concentration in Environmental Economics, BA

The requirement of 30 hours in economics must include, from among the following, 15 hours of core courses, 3 hours of electives including at least one WAC course in Economics, and 12 hours of concentration courses.

In the major area, 21 hours are to be taken under the regular grading system; the P/NC option is available for the remaining 9 hours and for all related courses.

Economics majors are required to take the following courses:

Code	Title	Hours
Core Courses		
ECON 1150	Principles Of Macroeconomics	3
ECON 1200	Principles Of Microeconomics	3
ECON 2810	Introduction to Econometrics	3
ECON 3150	Intermediate Macroeconomic Theory	3
ECON 3200	Intermediate Micro-Economic Theory	3
Elective		
Select 3 hours, chosen in consultation with the Economics Advisor.		3
Optional Concentration in Environmental Economics		
To earn the concentration in environmental economics, students must complete four of the following elective courses as part of their major:		12
ECON 3240	Environmental Economics	
or ECON 3270	Natural Resource Economics - WAC	
ECON 3300	BENEFIT-COST ANALYSIS	
ECON 4240/5240	Applied Environmental Economics (OR alternative economics course at 3000 level or above chosen in consultation with the undergraduate economics advisor)	
ECON 4280/5280	Energy Economics (OR alternative economics course at 3000 level or above chosen in consultation with the undergraduate economics advisor.)	
Related Courses <sup>1</sup>		
MATH 1850	Single Variable Calculus I (or equivalent)	
or MATH 1730	Calculus with Applications to Business and Finance	
MATH 2600	Introduction To Statistics (or equivalent)	
or BUAD 2060	Business Statistics	
Total Hours		30

<sup>1</sup> Majors are encouraged to meet the mathematics and statistics requirements at an early stage of their course work. Students must meet those requirements by choosing one calculus and one statistics course.

- B.A. in Economics (p. 1)
- Economics -Concentration In Data Analytics In Economics, BA (p. 1)
- Economics- Concentration In Environmental Economics, BA

## B.A. IN ECONOMICS

Students accepted in to the BA in Economics should be academically prepared to be placed in MATH 1730 or MATH 1850. Students placing into lower MATH levels - MATH 1180, MATH 1200 or MATH 1340, are able to replace elective credits with these courses and still complete their degree within 120 hours.

*Below is a sample plan of study. Consult your degree audit for your program requirements.*

<b>First Term</b>		<b>Hours</b>
AR 1000	First Year Orientation	1
ENGL 1110	College Composition I	3
ECON 1150	Principles Of Macroeconomics	3
or ECON 1155	or Principles of Macroeconomics with Data Applications	
MATH 1730	Calculus with Applications to Business and Finance <sup>1</sup>	5
Elementary Foreign Language I		4
<b>Hours</b>		<b>16</b>
<b>Second Term</b>		
ECON 1200	Principles Of Microeconomics	3
ENGL 1130	College Composition II: Academic Disciplines And Discourse	3
Elementary Foreign Language II		4
Select one of the following: (Related requirement)		3
MATH 2600	Introduction To Statistics	
BUAD 2060	Business Statistics	
HIST 1010-HIST 1200 Arts/Humanities Core (History)		3
<b>Hours</b>		<b>16</b>
<b>Third Term</b>		
ECON 2810	Introduction to Econometrics	3
ECON 3200	Intermediate Micro-Economic Theory	3
Social Sciences Core		3
Intermediate Foreign Language I or approved culture course		3
Arts/Humanities Core (Fine Art)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Term</b>		
ECON 3150	Intermediate Macroeconomic Theory	3
ECON Major Elective (WAC)		3
Natural Sciences Core		3
Natural Sciences Core (Lab)		1
Intermediate Foreign Language II or approved culture course		3
Arts/Humanities Core		3
<b>Hours</b>		<b>16</b>
<b>Fifth Term</b>		
ECON Major Elective 3000-4000 level		3
Natural Sciences Core		3
Non-US Diversity		3
ENGL 2710-ENGL 2800 Arts/Humanities Core (English Lit)		3

Related or minor course	3
<b>Hours</b>	<b>15</b>
<b>Sixth Term</b>	
ECON Major Elective 3000-4000 level	3
Diversity of US	3
Related or minor course (WAC)	3
Related or minor course	6
<b>Hours</b>	<b>15</b>
<b>Seventh Term</b>	
ECON Major Elective 3000-4000 level	3
Related course	3
Elective	9
<b>Hours</b>	<b>15</b>
<b>Eighth Term</b>	
ECON Major Elective 3000-4000 level	3
Elective	9
<b>Hours</b>	<b>12</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> For the calculus requirement, students may be exempted from this prescribed requirement through the successful completion of ECON 4300. Students who earn credit for ECON 4300 as a major elective will have the calculus requirement in the related fields waived and they may complete the required 18 credits with any electives from the published course list in the degree audit.

## Economics -concentration in Data Analytics in Economics, BA

Students accepted in to the BA in Economics should be academically prepared to be placed in MATH 1730 or MATH 1850. Students placing into lower MATH levels - MATH 1180, MATH 1200 or MATH 1340, are able to replace elective credits with these courses and still complete their degree within 120 hours.

*Below is a sample plan of study. Consult your degree audit for your program requirements.*

<b>First Term</b>		<b>Hours</b>
AR 1000	First Year Orientation	1
ENGL 1110	College Composition I	3
ECON 1150	Principles Of Macroeconomics	3
MATH 1730	Calculus with Applications to Business and Finance	5
Elementary Foreign Language I		4
<b>Hours</b>		<b>16</b>
<b>Second Term</b>		
ECON 1200	Principles Of Microeconomics	3
ENGL 1130	College Composition II: Academic Disciplines And Discourse	3
Elementary Foreign Language II		4
Select one of the following: (Related requirement)		3
MATH 2600	Introduction To Statistics	

BUAD 2060	Business Statistics	
HIST 1010-HIST 1200 Arts/Humanities Core (History)		3
<b>Hours</b>		<b>16</b>
<b>Third Term</b>		
ECON 2810	Introduction to Econometrics	3
ECON 3200	Intermediate Micro-Economic Theory	3
Social Sciences Core		3
Intermediate Foreign Language I or approved culture course		3
Arts/Humanities Core (Fine Art)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Term</b>		
ECON 3150	Intermediate Macroeconomic Theory	3
ECON Major Elective (WAC)		3
Natural Sciences Core		3
Natural Sciences Core (Lab)		1
Intermediate Foreign Language II or approved culture course		3
Arts/Humanities Core		3
<b>Hours</b>		<b>16</b>
<b>Fifth Term</b>		
DANN 2000	Proseminar in Data Analytics I	1
Natural Sciences Core		3
Non-US Diversity		3
ENGL 2710-ENGL 2800 Arts/Humanities Core (English Lit)		3
Related or minor course		3
<b>Hours</b>		<b>13</b>
<b>Sixth Term</b>		
ECON 3810	Applied Econometrics	3
Diversity of US		3
Related or minor course (WAC)		3
Related or minor course		6
<b>Hours</b>		<b>15</b>
<b>Seventh Term</b>		
ECON 4810	Econometrics Models And Methods I	3
Related course		3
Elective		9
<b>Hours</b>		<b>15</b>
<b>Eighth Term</b>		
ECON 4820	Econometrics Models And Methods II	3
DANN 4000	Proseminar in Data Analytics II	2
Elective		9
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>120</b>

## Economics- concentration in Environmental Economics, BA

Students accepted in to the BA in Economics should be academically prepared to be placed in MATH 1730 or MATH 1850. Students placing into lower MATH levels - MATH 1180, MATH 1200 or MATH 1340, are

able to replace elective credits with these courses and still complete their degree within 120 hours.

*Below is a sample plan of study. Consult your degree audit for your program requirements.*

<b>First Term</b>		<b>Hours</b>
AR 1000	First Year Orientation	1
ENGL 1110	College Composition I	3
ECON 1150	Principles Of Macroeconomics	3
MATH 1730	Calculus with Applications to Business and Finance	5
Elementary Foreign Language I		4
<b>Hours</b>		<b>16</b>
<b>Second Term</b>		
ECON 1200	Principles Of Microeconomics	3
ENGL 1130	College Composition II: Academic Disciplines And Discourse	3
Elementary Foreign Language II		4
Select one of the following: (Related requirement)		3
MATH 2600	Introduction To Statistics	
BUAD 2060	Business Statistics	
HIST 1010-HIST 1200 Arts/Humanities Core (History)		3
<b>Hours</b>		<b>16</b>
<b>Third Term</b>		
ECON 2810	Introduction to Econometrics	3
ECON 3200	Intermediate Micro-Economic Theory	3
Social Sciences Core		3
Intermediate Foreign Language I or approved culture course		3
Arts/Humanities Core (Fine Art)		3
<b>Hours</b>		<b>15</b>
<b>Fourth Term</b>		
ECON 3150	Intermediate Macroeconomic Theory	3
ECON Major Elective (WAC)		3
Natural Sciences Core		3
Natural Sciences Core (Lab)		1
Intermediate Foreign Language II or approved culture course		3
Arts/Humanities Core		3
<b>Hours</b>		<b>16</b>
<b>Fifth Term</b>		
ECON 3240	Environmental Economics	3
or ECON 3270	or Natural Resource Economics - WAC	
Natural Sciences Core		3
Non-US Diversity		3
ENGL 2710-ENGL 2800 Arts/Humanities Core (English Lit)		3
Related or minor course		3
<b>Hours</b>		<b>15</b>
<b>Sixth Term</b>		
ECON 3300	BENEFIT-COST ANALYSIS	3
Diversity of US		3
Related or minor course (WAC)		3

Related or minor course		6
<b>Hours</b>		<b>15</b>
<b>Seventh Term</b>		
ECON 4240	Applied Environmental Economics	3
or ECON 5240	or Applied Environmental Economics	
Related course		3
Elective		9
<b>Hours</b>		<b>15</b>
<b>Eighth Term</b>		
ECON 4280	Energy Economics	3
or ECON 5280	or Energy Economics	
Elective		9
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>120</b>

- PLO 1: Describe opportunity cost and its importance in decision making, marginal analysis, and the importance of understanding economic incentives.
- PLO 2: Explain the basic models of consumer and firm theory, such as the demand-supply model.
- PLO 3: Explain economic efficiency and the mechanism by which competitive markets lead to an efficient allocation of scarce resources.
- PLO 4: Recognize when markets fail to achieve efficiency and discuss the potential for efficiency-improving government intervention into inefficient markets.
- PLO 5: Explain the distinction between real and nominal values, and why this matters for understanding consumer and firm behavior as well as the national economy.
- PLO 6: Predict the impact of government fiscal and monetary policy - use of deficits, changes in the money supply, etc. - on overall economic performance.
- PLO 7: Explain and discuss the determinants of economic growth.
- PLO 8: Discuss the costs and causes of unemployment, and assess public policies to ameliorate it.
- PLO 9: Assess the tradeoff between unemployment and inflation.
- PLO 10: Apply economic models to analyze issues related to their employer's objectives, in either a profit maximizing business, or equality goals of a non-profit agency, or policy objectives of a government agency.
- PLO 11: Use various computer applications to perform statistical analysis and interpret the results in an economically meaningful way.
- PLO 12: Evaluate how economic concepts are used in economic analyses published in the popular media (newspapers, internet sources, etc.)