

# ANALYTICAL ECONOMICS MAJOR (B.S.)

<https://paulcollege.unh.edu/economics/program/bs/analytical-economics-major>

## Description

**B.S. in Analytical Economics** emphasizes the predictive and prescriptive modeling skills that are in high demand in today's labor market. Prescriptive modeling is quantitative and strategic decision analysis geared toward corporate decisions. Predictive modeling emphasizes data analysis skills used to develop the information needed to make these decisions.

## Requirements

### Degree Requirements

**Minimum Credit Requirement:** 128 credits

**Minimum Residency Requirement:** 32 credits must be taken at UNH

**Minimum GPA:** 2.0 required for conferral\*

**Core Curriculum Required:** Discovery & Writing Program Requirements

**Foreign Language Requirement:** No

All Major, Option and Elective Requirements as indicated.

\*Major GPA requirements as indicated.

### Major Requirements

B.S. analytical economics majors must complete eleven courses in economics with a grade of at least a C- (1.67) in each Paul College major course and an average grade of 2.3 or better in the major courses. In addition, majors must complete MATH 424A and ADMN 403, ADMN 410, ADMN 510, and an ethics course (PHIL 431 Business Ethics or equivalent). ECON 775 is the capstone course for the B.S. major and satisfies the capstone requirement of the University Discovery Program.

Code	Title	Credits
ECON 401	Principles of Economics (Macro)	4
ECON 402	Principles of Economics (Micro)	4
ECON 501	Business and Economic History	4
ADMN 403	Computing Essentials for Business	1
PAUL 405	Freshman Academic Experience I	1
PAUL 406	Freshman Academic Experience II	1
MATH 424A	Calculus for Social Sciences	4
ADMN 410	Management Information Systems	4
ADMN 510	Business Analytics and Statistics	4
PHIL 431	Business Ethics	4
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
ECON 606	Intermediate Microeconomics with Calculus <sup>1</sup>	4
ECON 611	Intermediate Macroeconomic Analysis <sup>1</sup>	4
ECON 726	Introduction to Econometrics	4
ECON 727	Advanced Econometrics <sup>2</sup>	4
<b>Electives:</b>		
At least two (2) Economics electives		8
<b>Capstone:</b>		

ECON 775	Applied Research Skills for Economists <sup>3</sup>	4
<b>Total Credits</b>		<b>63</b>

- <sup>1</sup> Major credit toward ECON 606 Intermediate Microeconomics with Calculus and/or ECON 611 Intermediate Macroeconomic Analysis will be awarded to transfer students only if equivalent courses have been taken at the upper level. Transfer students must take at least five of their economics courses at UNH. All economics-related courses taken at other institutions must be approved by the economics department in order for them to count toward the major.
- <sup>2</sup> Or other Department approved quantitative course
- <sup>3</sup> ECON 775 Applied Research Skills for Economists is the capstone course for the B.S. major and satisfies the capstone requirement of the University Discovery Program.

Students may petition to substitute one business administration course for an economics elective if the course is at the 600 level or above and if a grade of C- or better is earned. Students may earn no more than 16 credits in internships, independent studies, field experience, and supervised student teaching experience. All Analytical Economics majors must satisfy the bachelor of science degree requirements, and all Discovery Program requirements. Students satisfy the Inquiry requirement of the Discovery Program before the end of their sophomore year by completing an Inquiry or Inquiry-attribute course within the Paul College, or another course offered by another college at the University.

## Degree Plan

### Sample Degree Plan

*This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.*

#### First Year

Fall		Credits
ECON 401 or ECON 402	Principles of Economics (Macro) or Principles of Economics (Micro)	4
ADMN 403	Computing Essentials for Business	1
ADMN 410	Management Information Systems	4
ECON 501 or ENGL 401	Business and Economic History or First-Year Writing	4
MATH 424A	Calculus for Social Sciences	4
PAUL 405	Freshman Academic Experience I	1
<b>Credits</b>		<b>18</b>

#### Spring

ECON 402 or ECON 401	Principles of Economics (Micro) or Principles of Economics (Macro)	4
PHIL 431	Business Ethics	4
ENGL 401 or ECON 501	First-Year Writing or Business and Economic History	4
Discovery		4
PAUL 406	Freshman Academic Experience II	1
<b>Credits</b>		<b>17</b>

#### Second Year

Fall		
ECON 606	Intermediate Microeconomics with Calculus	4

ADMN 510	Business Analytics and Statistics	4
Discovery		4
Discovery		4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ECON 611	Intermediate Macroeconomic Analysis	4
ECON 565	Predictive Modeling: Data Driven Economic Analysis	4
Discovery		4
Discovery		4
<b>Credits</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ECON 726	Introduction to Econometrics	4
Economics Elective		4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ECON 727	Advanced Econometrics	4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
<b>Credits</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Economics Elective		4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ECON 775	Applied Research Skills for Economists	4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
Course selected in consultation with advisor <sup>1</sup>		4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>131</b>

- Students have strong oral communication skills. This includes fundamental skills in preparing and delivering presentations, as well as being able to explain technical material clearly and concisely.
- Students are able to apply a statistical model to an economic question and interpret the results.
- Students are proficient in applying a programming language to statistical analysis.

<sup>1</sup> Students can explore a second option, second major, minor, or general electives.

## Student Learning Outcomes

### Program Learning Outcomes

- Students have core proficiency in microeconomics. They understand key concepts including opportunity cost, marginal analysis, voluntary exchange, diminishing marginal returns, equilibrium and market structure.
- Students have core proficiency in macroeconomics. They understand key concepts including GDP, inflation, interest rates, business cycles, exchange rates, financial institutions and fiscal and monetary policy.