

# ECONOMICS (M.S.)

<https://paulcollege.unh.edu/economics/program/ms/economics>

## Description

Paul College's STEM designated Master of Science in Economics is a breed apart. The program offers an academic track and an industry track. Students also have the flexibility of pursuing a mixed track that combines courses from the academic and industry tracks.

The academic track provides a full year of doctoral-level economic theory, econometric analysis, and research seminar. It is designed for students whose goal is to become a research economist and possibly a Ph.D. economist.

The industry track's curriculum is unlike any other Master's program in the country. It is interdisciplinary, weaving together economic theory, data analytics, statistical methods, and data modeling. The program's mix of doctoral-level and applied classes is also distinctive. Students learn economic theory and statistical methods at the doctoral level. They also use economic theory and data to understand a range of business decision problems. Innovative applied classes include Macroeconomic Consulting and Strategy Analysis: Games and Auctions.

Few other Master's programs in the country provide a toolkit with comparable interdisciplinary range or rigor. Students learn economic theory and econometrics, code in R and STATA, and learn SQL, PowerBI, and Tableau all in one year. Graduates are uniquely trained to help businesses understand the market context, formulate decision problems, and manage the data analysis. People with this training are in high demand by organizations of all stripes.

Students enroll in an intensive Mathematical Economics course during the month of August. The program culminates with a capstone experience, which depends on a student's chosen track.

The program can be completed in 12 months. It starts with an intensive Mathematical Economics course that is taught in a concentrated manner over the first two weeks of the Fall semester. It is followed by two semesters of coursework. Some of the industry-track courses are scheduled on the 8-week term calendar. These term classes entail 3-credit hours and meet 3.5 hours a week. A capstone experience completes the degree requirements. Industry track students' capstone entails a corporate consulting project in the spring, while academic track students take a comprehensive exam in microeconomic or macroeconomic theory in early summer.

## Requirements

The program requires a minimum of **32 credit hours** of coursework and a capstone experience. All students must complete four core classes.

Code	Title	Credits
<b>The Core</b>		
ECON 825	Mathematical Economics <sup>1</sup>	4
ECON 926	Econometrics I	4
ECON 927	Econometrics II	4
ECON 976	Microeconomics I	4
<b>Industry Track</b>		
DS 801	Business Intelligence <sup>2</sup>	3
DS 804	Exploration and Communication of Data <sup>2</sup>	3

ECON 890	Analytical Economics in Practice (Capstone) <sup>2</sup>	3
ECON 871	Macroeconomic Consulting <sup>2</sup>	3
ECON 875	Strategy Analysis: Games and Auctions <sup>2</sup>	3
Elective <sup>3</sup>		

<b>Academic Track</b>		
ECON 972	Macroeconomics I	4
ECON 973	Macroeconomics II	4
ECON 977	Microeconomics II	4
ECON 988	Graduate Economics Seminar (Fall and Spring)	4
Capstone - Comprehensive Exam		

<b>Mixed Track</b>		
ECON 871	Macroeconomic Consulting <sup>2</sup>	3 or 4
or ECON 972	Macroeconomics I	

At least 15 credits of classes (if ECON 972 is selected) or 14 credits of classes (if ECON 871 is selected) from either the industry or academic track. Students are recommended to take at least 5 credits of classes beyond the core during the fall semester and 8 credits of classes beyond the core during the spring semester.

- <sup>1</sup> Course is offered in the first two weeks of the Fall semester and involves in-class and online learning. It provides the mathematical foundation needed for the fall theory and econometrics classes.
- <sup>2</sup> Course is scheduled on an 8-week term calendar and entails 32 hours of contact time.
- <sup>3</sup> Electives include ECON 928 Econometrics III, Time Series Econometrics, DS 809 Time Series Analysis, DS 807 Modeling Unstructured Data, MATH 838 Data Mining and Predictive Analytics, ACFI 810 Big Data in Finance, ADMN 863 Marketing Analytics, and other approved classes. The number of credit hours will vary depending on the choice of the elective.

## Accelerated Master's

Our Accelerated Master of Science in Economics (MSE) option provides an opportunity for UNH undergraduate students to begin graduate study while completing a bachelor's degree—making you stand out among other job applicants with advanced skills and increasing your earning potential. Qualified students can begin earning graduate credit during their undergraduate programs, allowing them to maximize their time on campus and return on their educational investment.

### Eligibility:

- Current UNH undergraduate student with a GPA of 3.2 or higher.
- Apply **before** completing 90 undergraduate credits.
- Acceptance into the Accelerated Master's Program **before** taking 800-level courses.

### Accelerated MSE Requirements:

- Qualified students may complete up to 12 credits at the 800-level during their undergraduate studies, earning dual credit toward their B.S. and M.S. degrees.
- Once a qualified student matriculates into the MSE program (after completing undergraduate degree), the student will take a minimum of 20 additional credits to complete the 32 credit MSE program requirement.
- Students will be required to earn a B- or better in graduate courses to earn credits toward their degree.

### Approved Dual Credit Electives

To earn graduate credits, students need to enroll in the 800-level sections of approved dual credit courses. The 800-level sections require additional

work beyond the requirements for the undergraduate versions. The following is the list of approved dual credit courses for the accelerated path in the MSE program:

Code	Title	Credits
ECON 871	Macroeconomic Consulting	3
ECON 875	Strategy Analysis: Games and Auctions	3
MATH 838	Data Mining and Predictive Analytics	3
Other approved 800-level electives		

## Student Learning Outcomes

### Core Competencies

- Utilize economic theory to formulate and solve optimization problems for consumer and firm decision making (e.g., marginal analysis).
- Apply statistical and econometric methods using programming languages to analyze and draw valid conclusions from data.
- Demonstrate an ability to formulate well-designed research projects.

### Industry Track

- Apply principles of data analytics to store, manage, and visualize large datasets.
- Identify and demonstrate how economic theory, econometrics, and data analytics can be applied to decision making at an enterprise level.

### Academic Track

- Apply advanced graduate-level microeconomic and macroeconomic theory to understand markets and the economy.
- Demonstrate an ability to comprehend and critique current scholarly research in macroeconomics and microeconomics.