Economics and Mathematics, BS (Boston)

Given the mathematical and graphical models used extensively in economics, economics and mathematics are natural partners. This combined major is designed for students who want to further develop their mathematics skills to enhance their understanding and interest in economics. The program is strongly recommended for students with an interest in pursuing graduate studies in economics.

Program Requirements

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

Universitywide Requirements

All undergraduate students are required to complete the Universitywide Requirements (https://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/).

NUpath Requirements

All undergraduate students are required to complete the NUpath Requirements (https://catalog.northeastern.edu/undergraduate/university-academics/nupath/).

Economics Requirements

Code	Title	Hours
Introduction to College		
ECON 1000	Economics at Northeastern	1
or MATH 1000	Mathematics at Northeastern	
Required Economics		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
ECON 2315	Macroeconomic Theory	4
ECON 2316	Microeconomic Theory	4
ECON 2560	Applied Econometrics	4
Economics Electives		
Complete 4 economics electives found in the following ranges, with no more than two in the ECON 1200 to ECON 1999 range. Unless otherwise noted in specific combined majors, required core economics courses cannot be counted as electives by students completing Department of Economics programs:		16
ECON 1200 to ECON 1999		
ECON 2990 to ECON 3559		
ECON 3561 to ECON 4689		
ECON 4900 to ECON 4996		
ECON 5200 to ECON 5999		

Mathematics Requirements

Code	Title	Hours
Required Mathematics		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 1365	Introduction to Mathematical Reasoning	4
MATH 2321	Calculus 3 for Science and Engineering	4
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
Mathematics Electives		
Complete two courses in the following range:		8
MATH 3001 to MATH 4999		
The following courses are recommended:		
MATH 3150	Real Analysis	
MATH 4581	Statistics and Stochastic Processes	

Breadth Course

Code	Title	Hours
Computer Science		
Choose one of the following:		4-5
CS 1100 and CS 1101	Computer Science and Its Applications and Lab for CS 1100 *	
MISM 2510	Fundamentals of Information Analytics	

* Selecting this 5 SH option will add one additional semester hour to your degree program.

Integrative Requirements

Code	Title	Hours
Advanced Writing in the Disciplines		
ENGW 3308	Advanced Writing in the Social Sciences	4
Integrative Course		
Complete one of the following:		4
ECON 4692	Senior Economics Seminar	
or ECON 4997	Senior Economics Thesis	
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	

Combined Major GPA/Credit Requirement

Code	Title	Hours
Grades in the following 4 courses must average to a minimum of C (2.000):		
ECON 2315	Macroeconomic Theory	
ECON 2316	Microeconomic Theory	
ECON 2560	Applied Econometrics	
MATH 3081	Probability and Statistics	

A cumulative GPA of 2.000 is required in all math courses.
A grade of C or higher is required in all math courses numbered MATH 2999 or below; grades below C will not count toward the degree.

Economics and Mathematics Major Credit Requirement

Complete 76 semester hours in the major.

Program Requirement

128 total semester hours required.

Plan of Study

Sample Plan of Study

FOUR YEARS, TWO CO-OPS IN SUMMER SECOND HALF/FALL

Year 1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1100 or MISM 2510	4	ECON 1116	4	MATH 2321	4	Elective	4
ECON 1115	4	ENGW 3308	4	Elective	4	Elective	4
MATH 1000 or ECON 1000	1	MATH 1342	4				
MATH 1341	4	Elective	4				
MATH 1365	4						
	17		**16**		**8**		**8**

Year 2

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ECON 2315	4	ECON 2316	4	MATH 3081	4	Co-op	0
MATH 2341	4	MATH 2331	4	Elective	4		
Elective	4	ECON elective 1	4				

Elective	4	Math elective 1	4				
	16		**16**		**8**		**0**

Year 3

Fall	**Hours**	**Spring**	**Hours**	**Summer 1**	**Hours**	**Summer 2**	**Hours**
Co-op	0	ECON 2560	4	Elective	4	Co-op	0
		ECON elective 2	4	Elective	4		
		Math elective 2	4				
		Elective	4				
	0		**16**		**8**		**0**

Year 4

Fall	**Hours**	**Spring**	**Hours**
Co-op	0	ECON 4692, MATH 4025, MATH 5131, or ECON 4997	4
		ECON elective 3	4
		ECON elective 4	4
		Elective	4
	0		**16**

Total Hours: 129