# Mathematics and Sociology, BS

In the mathematics and sociology combined-major BS program, sociology and mathematics courses help lay the groundwork for strong basic training that seeks to prepare students for developing sociological models using mathematics.

#### **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 (http://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/).

#### **NUpath Requirements**

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

#### **Mathematics Requirements**

- Code	Title	Hours
Problem Solving		
MATH 1365	Introduction to Mathematical Reasoning	4
Calculus		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
Intermediate and Advanced Mathemati	cs	
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
Math Electives		
Complete two courses in the following	range that are not required in the requirements above:	8
MATH 3001 to MATH 5999		
Sociology Requirements		
Code	Title	Hours
Sociology Required Courses		Tiouro
ANTH 1101	Peoples and Cultures	4
ANTH 2305	Global Markets and Local Culture	4
SOCL 2320	Statistical Analysis in Sociology	4
SOCL 2321	Research Methods in Sociology	4
SOCL 3300	Social Theory	4
Sociology Electives	,	
Complete one course from each course	range:	
Introductory Elective	-	4
SOCL 1101 to SOCL 1999		
Intermediate Elective		4
SOCL 2000 to SOCL 3999		
Advanced Elective		4
SOCL 4000 to SOCL 4999		
Capstone Requirement		
SOCL 4600	Senior Seminar	4

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# Integrative Requirement

Code	Title	Hours
Complete one of the following:		4
MATH 4025	Applied Mathematics Capstone	
MATH 5131	Introduction to Mathematical Methods and Modeling	
SOCL 1280	The Twenty-First-Century Workplace	
SOCL 2485	Environment, Technology, and Society	
SOCL 4528	Computers and Society	

## Mathematics and Sociology Combined Major Credit Requirement

Complete 68 semester hours in the major.

## **Program Requirement**

128 total semester hours required

### **Plan of Study**

Year 1							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 1101		4 MATH 1342		4 Vacation		Vacation	
ENGW 1111		4 SOCL 2320		4			
MATH 1341		4 SOCL 3300		4			
MATH 1365		4 Elective		4			
		16		16		0	0
Year 2							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
ANTH 2305		4 MATH 2341		4 Vacation		Vacation	
MATH 2321		4 MATH elective		4			
SOCL 2321		4 SOCL elective		4			
Elective		4 Elective		4			
		16		16		0	0
Year 3							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 2331		4 Co-op		Со-ор		Vacation	
MATH elective		4					
SOCL elective		4					
Elective		4					
		16		0		0	0
Year 4							
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
MATH 3081		4 Co-op		Со-ор		Vacation	
SOCL elective		4					
Elective		4					
Elective		4					
		16		0		0	0
Year 5							
Fall	Hours	Spring	Hours				
Elective		4 Capstone		4			
Elective		4 Integrative course		4			
Elective		4 Elective		4			
Elective		4 Elective		4			
		16		16			

Total Hours: 128