# Mathematics and Business Administration, BS

In the BS Mathematics and Business Administration program, business and mathematics courses lay the groundwork for strong basic training in finance.

# **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
Required Courses		
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 3081	Probability and Statistics	4
Calculus and Linear Algebra (Required) and	Differential Equations (Recommended)	
Complete either Option 1 or Option 2 below:		8
Option 1 (Recommended)		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2341	Differential Equations and Linear Algebra for Engineering	
Option 2		
MATH 2321	Calculus 3 for Science and Engineering	
MATH 2331	Linear Algebra	
Co-op Reflections		
MATH 3000	Co-op and Experiential Learning Reflection Seminar 1	1
Mathematics Electives		
Complete three courses in the range MATH	3001 to MATH 5999. The following courses are recommended:	12
MATH 4681	Probability and Risks	
MATH 4682	Theory of Interest and Basics of Life Insurance 1	
MATH 4581	Statistics and Stochastic Processes	

# **Business Requirements**

Code	Title	Hours
Accounting		
ACCT 1201	Financial Accounting and Reporting	4
ACCT 2301	Managerial Accounting	4
Finance		
FINA 2201	Financial Management	4
Marketing		
MKTG 2201	Introduction to Marketing	4
Organizational Behavior		
ORGB 3201	Organizational Behavior	4
International Business/Social Responsibility	y	
INTB 1203	International Business and Global Social Responsibility	4

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STRT 4501 Strategy in Action 4

# **Integrative Course**

Code	Title	Hours	
MATH 4581	Statistics and Stochastic Processes	4	

#### **Business Concentration**

Complete one of the following business concentrations. One concentration is required. A second concentration is optional.

- Accounting (http://catalog.northeastern.edu/undergraduate/business/concentrations/accounting/)
- · Accounting and Advisory Services (http://catalog.northeastern.edu/undergraduate/business/concentrations/accounting-advisory-services/)
- · Brand Management (http://catalog.northeastern.edu/undergraduate/business/concentrations/brand-management/)
- · Business Analytics (http://catalog.northeastern.edu/undergraduate/business/concentrations/business-analytics/)
- · Corporate Innovation (http://catalog.northeastern.edu/undergraduate/business/concentrations/corporate-innovation/)
- Entrepreneurial Startups (http://catalog.northeastern.edu/undergraduate/business/concentrations/entrepreneurial-startups/)
- · Family Business (http://catalog.northeastern.edu/undergraduate/business/concentrations/family-business/)
- Finance (http://catalog.northeastern.edu/undergraduate/business/concentrations/finance/)
- · Fintech (http://catalog.northeastern.edu/undergraduate/business/concentrations/fintech/)
- Healthcare Management and Consulting (http://catalog.northeastern.edu/undergraduate/business/concentrations/healthcare-management-consulting/)
- International Business (http://catalog.northeastern.edu/undergraduate/business/concentrations/international-business/) (only available as a second concentration)
- Management (http://catalog.northeastern.edu/undergraduate/business/concentrations/management/)
- Management Information Systems (http://catalog.northeastern.edu/undergraduate/business/concentrations/management-information-systems/)
- · Marketing (http://catalog.northeastern.edu/undergraduate/business/concentrations/marketing/)
- Marketing Analytics (http://catalog.northeastern.edu/undergraduate/business/concentrations/marketing-analytics/)
- Social Innovation and Entrepreneurship (http://catalog.northeastern.edu/undergraduate/business/concentrations/social-innovation-entrepreneurship/)
- · Supply Chain Management (http://catalog.northeastern.edu/undergraduate/business/concentrations/supply-chain-management/)

#### **Supplemental Courses**

Code	Title	Hours
Economics		
ECON 1115	Principles of Macroeconomics	4
ECON 1116	Principles of Microeconomics	4
Co-op Preparation		
BUSN 1103	Professional Development for Business Co-op	1
or EESC 2000	Professional Development for Co-op	

#### **Business Cooperative Education Requirement**

Complete one six-month co-op experience.

#### **Mathematics GPA Requirement**

Minimum 2.000 GPA required in all mathematics courses

#### **Business GPA Requirement**

Minimum 2.000 GPA required in business courses

# **Program Requirement**

128 total semester hours required

#### **Plan of Study**

Year	1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
ENGW 1111		4 MATH 1342		4 MKTG 2201		4 NU Path	4	
ECON 1115		4 MATH 1365		4 Open Elective		4 Open Elective	4	

MATH 1341		4 ECON 1116		4				
ACCT 1201		4 ACCT 2301		4				
BUSN 1102 or MATH 1000		1						
		17		16		8		8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
FINA 2201		4 Co-op		Со-ор		ORGB 3201		4
INTB 1203		4				NU Path		4
MATH 3081		4						
MATH 2321		4						
BUSN 1103 or EESC 2000		1						
		17		0		0		8
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
<b>Fall</b> Concentration Course 1	Hours	Spring 4 Co-op	Hours	Summer 1 Co-op	Hours	Summer 2 Concentration Course 2	Hours	4
	Hours		Hours		Hours		Hours	4
Concentration Course 1	Hours	4 Co-op	Hours		Hours	Concentration Course 2	Hours	
Concentration Course 1 MATH 2341 or 2331	Hours	4 Co-op 4	Hours		Hours	Concentration Course 2	Hours	
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999)	Hours	4 Co-op 4 4	Hours		Hours	Concentration Course 2	Hours	
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999)	Hours	4 Co-op 4 4	Hours	Со-ор	Hours	Concentration Course 2 Open Elective	Hours	4
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999) ENGW 3304 or 3307	Hours	4 Co-op 4 4	Hours	Со-ор	Hours	Concentration Course 2 Open Elective	Hours	4
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999) ENGW 3304 or 3307 Year 4		4 Co-op 4 4 4 16		Со-ор	Hours	Concentration Course 2 Open Elective	Hours	4
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999) ENGW 3304 or 3307  Year 4 Fall		4 Co-op 4 4 4 5 Spring		Со-ор	Hours	Concentration Course 2 Open Elective	Hours	4
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999) ENGW 3304 or 3307  Year 4 Fall Concentration Course 3		4 Co-op 4 4 4 16 Spring 4 NU Path		0 4	Hours	Concentration Course 2 Open Elective	Hours	4
Concentration Course 1 MATH 2341 or 2331 Math Elective (3001-5999) ENGW 3304 or 3307  Year 4 Fall Concentration Course 3 Math Elective (3001-5999)		4 Co-op 4 4 4 16 Spring 4 NU Path 4 Open Elective		Co-op  0  4 4	Hours	Concentration Course 2 Open Elective	Hours	4

Total Hours: 130