The information science and business combined major provides a technical degree with a strong grounding in business. Information science combines concepts and skills from computer science, behavioral and social science, and system design into an integrated, people-centered curriculum. You'll complete most of the requirements of a business major, including macroeconomics and microeconomics, while studying how information is acquired, organized, communicated, and used by both people and computers.

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.

University-Wide Requirements
All undergraduate students are required to complete the University-Wide 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).

Computer Science Courses

Computer Science Overview
CS 1200  Computer Science/Information Science 1

CS 1210  Computer Science/Information Science Overview 2: Co-op Preparation 1

Computer Science Fundamental Courses
A grade of C– or higher is required:
CS 1800  Discrete Structures 5
and CS 1802  and Seminar for CS 1800 5
or CS 1801  Recitation for CS 1800 5

CS 2500  Fundamentals of Computer Science 1 5
and CS 2501  and Lab for CS 2500 5

CS 2510  Fundamentals of Computer Science 2 5
and CS 2511  and Lab for CS 2510 5

Computer Science Required Courses
CS 3200  Database Design 4
CS 3500  Object-Oriented Design 4
CS 4800  Algorithms and Data 4

Information Science Required Courses
IS 2000  Principles of Information Science 4
IS 3500  Information System Design and Development 4
IS 4800  Empirical Research Methods 4

Computer Science Senior Seminar
THTR 1170  The Eloquent Presenter 1

Business Courses
Required Business Courses
ACCT 1201  Financial Accounting and Reporting 4
ACCT 2301  Managerial Accounting 4
FINA 2201  Financial Management 4
ORGB 3201  Organizational Behavior 4
MKTG 2201  Introduction to Marketing 4
MGSC 2301  Business Statistics 4

Choose one of the following:
STRT 4501  Strategy in Action 4
STRT 4514  Internal Case Competition Challenge 4
STRT 4516  External Case Competition Challenge 4

1  Strategy in Action (STRT 4501), Internal Case Competition Challenge (STRT 4514), and External Case Competition Challenge (STRT 4516) all satisfy the capstone requirement.

Business Concentration
Complete a four-course business concentration from the following list. Requirements for the concentrations are listed below (p. 2).

• Accounting
• Entrepreneurship and Innovation
• Finance
• Management
• Marketing
• Supply Chain Management

Integrative Requirement
MISM 3305  Information Resource Management 4
MISM 3404  Data Communications 4

Supporting Courses
Mathematics
MATH 1341  Calculus 1 for Science and Engineering 4
or MATH 1231  Calculus for Business and Economics 4

Economics
ECON 1115  Principles of Macroeconomics 4
ECON 1116  Principles of Microeconomics 4

Computing and Social Issues
Complete one of the following:

INSH 2102  Bostonography: The City through Data, Texts, Maps, and Networks 4
PHIL 1145  Technology and Human Values 4
SOCL 1280  The 21st-Century Workplace 4
SOCL 3485  Environment, Technology, and Society 4
SOCL 4528  Computers and Society 4
ANTH 3418  Wired/Unwired: Cybercultures and Technopolitics 4
IA 5240  Cyberlaw: Privacy, Ethics, and Digital Rights 4

Computer Science Writing Requirement
College Writing
ENGW 1111  First-Year Writing 4
Advanced Writing in the Disciplines
ENGW 3302 Advanced Writing in the Technical Professions 4
or ENGW 3315 Interdisciplinary Advanced Writing in the Disciplines

Required General Electives
Complete four general electives. 16

Business Cooperative Education Requirement
Complete one six-month co-op experience.

Information Science GPA Requirement
Minimum 2.000 GPA required in all CS and IS courses

Business GPA Requirement
Minimum 2.000 GPA required in business courses

NUpath Requirements Satisfied
• Engaging with the Natural and Designed World
• Conducting Formal and Quantitative Reasoning
• Analyzing and Using Data
• Understanding Societies and Institutions
• Writing in the First Year
• Advanced Writing in the Disciplines
• Writing-intensive in the Major
• Demonstrating Thought and Action in a Capstone

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

Program Requirement
133 total semester hours required

Business Concentrations

CONCENTRATION IN ACCOUNTING

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<td>ACCT 3401</td>
<td>Financial Reporting and Analysis 1</td>
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<td>ACCT 4501</td>
<td>Financial Reporting and Analysis 2</td>
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Electives
Complete two of the following: 8
ACCT 3403 Accounting Information Systems
ACCT 3416 Strategic Cost Analysis for Decision Making
ACCT 4412 Auditing and Other Assurance Services
ACCT 4414 Income Tax Determination and Planning

CONCENTRATION IN ENTREPRENEURSHIP AND INNOVATION

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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</table>
| Note: The following courses do not count toward this concentration:
ENTR 1201 The Entrepreneurial Universe
ENTR 3308 Business Economic History of South Africa
ENTR 3318 Business, Economics, and History of Hispaniola and Latin America

ENTR 3328 Field Research in Sustainable Business
ENTR 3338 Field Research in Sustainable Energy in Iceland
ENTR 3346 Family Business in Italy
ENTR 4510 Management Consulting Abroad
ENTR 4514 Development Practice and Global Citizenship in India

Introductory Course
ENTR 2301 Innovation! 4
or ENTR 2303 Entrepreneurial Marketing and Selling

Capstone Course
Complete one of the following: 4
ENTR 4501 Business Planning for Technology Ventures
ENTR 4503 Business Planning for Small and Medium Enterprises
ENTR 4505 Entrepreneurial Growth Strategy for Technology Ventures
ENTR 4506 Advanced Studies in Social Enterprise

Electives
Note: Only one non-ENTR course may be used as an elective.
Complete two of the following: 8
ENTR 2206 Global Social Enterprise
ENTR 2215 Understanding Family Enterprise
ENTR 2414 Social Responsibility of Business in an Age of Inequality

ENTR 2301 Innovation! (if not used as introductory course)
ENTR 2303 Entrepreneurial Marketing and Selling (if not used for introductory course)
ENTR 3210 Social Impact Investing: Connecting Compassion and Capital
ENTR 3212 Innovation for Social Change
ENTR 3217 Global Family Business Leadership
ENTR 3219 Microfinance: Fostering Entrepreneurship in the Developing World

ENTR 3220 International Entrepreneurship and Innovation Consulting
ENTR 3305 Entrepreneurial Strategy and Business Model Design
ENTR 3306 Global Entrepreneurship
ENTR 3316 Microfinance and Economic Development in Latin America
ENTR 3320 Base of Pyramid Innovation
ENTR 3326 Sustainability in the Latin American Business Environment
ENTR 3330 Lean Design and Development for Entrepreneurs

ENTR 3336 Resource Management and Renewable Energy in Iceland
ENTR 3348 Family Business: A Global Perspective
ENTR 3401 Management of Operations and Growth in Small- and Medium-Sized Enterprises

ENTR 3403 Managing Operations in a Technology-Based Startup Firm
### Information Science and Business Administration, BS

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<tr>
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<td>Entrepreneurship and Intrapreneurship in Innovation-Driven Markets</td>
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<tr>
<td>ENTR 3520</td>
<td>Impact Investing and Social Finance</td>
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<td>ENTR 4225</td>
<td>Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances</td>
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<tr>
<td>ENTR 4512</td>
<td>Social Entrepreneurship and Sustainable Development in India</td>
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<tr>
<td>FINA 4610</td>
<td>Entrepreneurial Finance, Innovation Valuation, and Private Equity</td>
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<td>MGMT 3302</td>
<td>Negotiating in Business</td>
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#### CONCENTRATION IN FINANCE

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<td>or FINA 3303</td>
<td>Investments</td>
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</table>

#### Electives

Complete three of the following: 12 hours

- ENTR 3520 Impact Investing and Social Finance or FINA 2720 Sustainability in the Business Environment
- FINA 3301 Corporate Finance (if not selected as a required course)
- FINA 3303 Investments (if not selected as a required course)
- FINA 4310 Working Capital Management
- FINA 4312 Issues in Corporate Governance
- FINA 4320 International Financial Management
- FINA 4410 Valuation and Value Creation
- FINA 4412 Personal Financial Planning
- FINA 4420 Mergers and Acquisitions
- FINA 4512 Financial Risk Management
- FINA 4514 Investment Banking
- FINA 4516 Real Estate Finance
- FINA 4518 Risk Management and Insurance
- FINA 4524 Credit Analysis
- FINA 4526 Core Topics in Alternative Investments
- FINA 4983 Special Topics in Finance
- FINA 4602 Turnaround Management
- FINA 4604 Fixed-Income Securities
- FINA 4608 Advanced Financial Strategy
- FINA 4610 Entrepreneurial Finance, Innovation Valuation, and Private Equity

#### CONCENTRATION IN MANAGEMENT

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<td>MGMT 4501</td>
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#### Electives

Note: Only one non-MGMT course may be used as an elective.

Complete three of the following: 12 hours

- MGMT 3302 Negotiating in Business
- MGMT 3330 Developing Leaders for Global Sustainability
- MGMT 3340 Managing Healthcare Organizations: Critical Challenges and New Approaches
- MGMT 3370 Leading and Managing Change
- MGMT 3420 Managing Human Capital
- MGMT 3435 Social Networks and Organizations
- MGMT 3510 Managing Global Teams Virtually and Locally
- MGMT 3530 Project Management
- MGMT 4310 The Management Practices of Great Organizations
- MGMT 4410 Human Resources and Workforce Analytics
- MGMT 4603 Leadership Seminar
- ENTR 2215 Understanding Family Enterprise
- ENTR 2414 Social Responsibility of Business in an Age of Inequality
- ENTR 4225 Corporate Entrepreneurship through Global Growth, Acquisitions, and Alliances

#### CONCENTRATION IN MARKETING

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#### Electives

Complete two of the following: 8 hours

- MKTG 2301 Marketing and Society
- MKTG 3301 Marketing Management
- MKTG 3501 Marketing Analytics
- MKTG 4310 Retailing
- MKTG 4420 Sales Management
- MKTG 4502 Marketing in the Service Sector
- MKTG 4504 Advertising and Brand Promotion
- MKTG 4506 Consumer Behavior (if not selected as a required course)
- MKTG 4508 Digital Marketing
- MKTG 4510 New Product Development
- MKTG 4512 International Marketing

#### CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

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<td>SCHM 3310</td>
<td>Logistics and Transportation Management</td>
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#### Elective

Complete one of the following: 4 hours

- SCHM 3308 Supply Chain Analytics
- SCHM 3320 Demand Planning and Forecasting
- SCHM 3330 Sustainability and Supply Chain Management
### Plan of Study

**Sample Patterns:**

**Four Years, Two Co-ops in Summer 2/Fall**

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<th>Year 1</th>
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**Total Hours: 134**