Biology and International Business, BS (Boston)

The biology and international business combined major prepares students to become versatile leaders in the global economy who can navigate the complex intersection of life sciences and commerce. The program develops professionals who can bridge the gap between laboratory innovation and worldwide commercial impact.

The program integrates rigorous training in biological sciences with comprehensive international business education. As the biotechnology, pharmaceutical, and medical device industries become increasingly globalized, companies require professionals who not only understand the science behind their products but can also manage international regulatory frameworks, cross-cultural partnerships, and global market strategies.

Students develop deep scientific literacy—enabling them to evaluate research, understand product development pipelines, and communicate effectively with R&D teams about innovations in human health and therapeutics. Students integrate scientific knowledge with the strategic, financial, and cross-cultural competencies essential for launching products across borders, negotiating with international stakeholders, and leading teams in multicultural environments.

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/general-education-requirements/#nupathtext).

Supporting Classes

Code	Title	Hours
BIOL 1000	Biology at Northeastern	
or BUSN 1102	Personal Skill Development for Business	
BUSN 1103	Professional Development for Business Co-op	
or EESC 2000	Professional Development for Co-op	

Biology Requirements

Code	Title	Hours
Biology Core Courses		
BIOL 1107 and BIOL 1108	Foundations of Biology and Lab for BIOL 1107	5
BIOL 2299	Inquiries in Biological Sciences	4
BIOL 2301 and BIOL 2302	Genetics and Molecular Biology and Lab for BIOL 2301	5
BIOL 2309	Biology Project Lab	4
BIOL 3611 and BIOL 3612	Biochemistry and Lab for BIOL 3611	5
Organismal and Evolutionary Biology Elective		
Complete one of the following:		4-5
BIOL 2327	Human Parasitology	
BIOL 3401	Comparative Vertebrate Anatomy	
BIOL 3413	Current Topics in Organismal and Population Biology	
BIOL 5585	Evolution	
EEMB 2302 and EEMB 2303	Ecology and Lab for EEMB 2302	
EEMB 2400	Introduction to Evolution	
EEMB 2610	Plant Biology	
EEMB 2700 and EEMB 2701	Marine Biology and Lab for EEMB 2700	

EEMB 3460	Conservation Biology	
EEMB 3466	Disease Ecology	
EEMB 3600	Animal Behavior	
Intermediate to Advanced Biology Elective		
Complete one of the following:		4-5
BIOL 2327 to BIOL 3999		
BIOL 4705 to BIOL 4990		
EEMB 2302 to EEMB2400		
EEMB 3455 to EEMB 3466		
EEMB 5130		
Supporting Courses for Biology		
Chemistry		
CHEM 1161 and CHEM 1162 and CHEM 1163	General Chemistry for Science Majors and Lab for CHEM 1161 and Recitation for CHEM 1161	5
CHEM 2311 and CHEM 2312	Organic Chemistry 1 and Lab for CHEM 2311	5
CHEM 2313 and CHEM 2314	Organic Chemistry 2 and Lab for CHEM 2313	5
Math		
MATH 1341	Calculus 1 for Science and Engineering	4
Physics		
PHYS 1145 and PHYS 1146	Physics for Life Sciences 1 and Lab for PHYS 1145	5

Business Requirements

Code	Title	Hours
Business Requirements		
ACCT 1201	Financial Accounting and Reporting	4
ECON 1115	Principles of Macroeconomics	4
or ECON 1116	Principles of Microeconomics	
MGSC 2301	Business Statistics	4
or ENVR 2500 and ENVR 2501	Biostatistics and Lab for ENVR 2500	
Business Electives		
Complete two of the following:		8
ACCT 2301	Profit Analysis for Managers and Advisors	
FINA 2201	Financial Management	
INNO 2301	Innovation!	
MISM 2301	Introduction to Information Systems and Digital Technologies	
ORGB 3201	Organizational Behavior	
or ORGB 3203	Behavioral Aspects of Digital Transformation	
SCHM 2301	Supply Chain and Operations Management	
Additional International Business Elective		
Complete one of the following:		4
FINA 4320	International Financial Management	
INTB 2501	Competing to Win in Emerging Markets	
INTB 3205	Understanding and Managing Cultural Differences	
INTB 3310	Cultural Aspects of International Business	
INTB 3320	International Business Management and Environment	
INTB 4983	Special Topics in International Business	
MKTG 4512	International Marketing	
SCHM 3301	Global Supply Chain Strategy	

Required Concentration

- Global Business and Strategy (https://catalog.northeastern.edu/undergraduate/business/concentrations/global-business-strategy/)

International Experiential Learning

Code	Title	Hours
Complete one of the following:		
One Dialogue of Civilizations (Summer Program) [1]		
One semester of study-abroad experience (N.U.in or London Scholars or Semester In London) [1]		
ABRC		
ABRD		
GBST 5101		
One summer traditional study-abroad or Summer In experience [1]		
ABRD		
GBST 5101		
One co-op abroad experience [1]		
COOP 3947	Co-op Work Experience Abroad--Half Time	
COOP 3948	Co-op Work Experience Abroad	
One internship experience abroad [1]		
EEBA 2948	Internship Experience Abroad	

[1] Courses listed here to fulfill this requirement are placeholder registrations pending evaluation of the student's coursework completed at another institution.

Business Experiential Requirement

Code	Title	Hours
Complete at least one of the following experiences:		0-8
BUSN 4945	Experiential Professional Practicum	
COOP 3945	Co-op Work Experience	
COOP 3946	Co-op Work Experience--Half Time	
COOP 3947	Co-op Work Experience Abroad--Half Time	
COOP 3948	Co-op Work Experience Abroad	
COOP 3949	Internship Exchange	
EEBA 2945	Internship Experience	
EEBA 2948	Internship Experience Abroad	

Integrative Requirements

Code	Title	Hours
Complete one of the following:		4
BIOE 5510	Bioengineering Products/Technology Commercialization	
BIOL 5549	Inventions in Microbial Biotechnology	
INTB 3401	The Business World of Biotechnology	

Business GPA Requirement

Minimum 2.000 GPA required in business courses

Biology GPA Requirement

Minimum 2.000 GPA required in all BIOC, BIOL, CHEM, EEMB, ENVR, MATH, PHYS, and PSYC courses

Program Requirement

128 total semester hours required