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).

Chemistry Major Technical Requirements
Mathematics
MATH 1341  Calculus 1 for Science and Engineering  4
MATH 1342  Calculus 2 for Science and Engineering  4

Physics 1
PHYS 1151  Physics for Engineering 1  5
and PHYS 1152  and Lab for PHYS 1151
and PHYS 1153  and Interactive Learning Seminar for PHYS 1151

Physics 2
PHYS 1155  Physics for Engineering 2  5
and PHYS 1156  and Lab for PHYS 1155
and PHYS 1157  and Interactive Learning Seminar for PHYS 1155

Chemistry Major Requirements
General Chemistry 1
CHEM 1217  General Chemistry 1 for Chemical Science Majors  6
and CHEM 1218  and Lab for CHEM 1217

General Chemistry 2
CHEM 1220  General Chemistry 2 for Chemical Science Majors  6
and CHEM 1221  and Lab for CHEM 1220

Intermediate-Level Chemistry—Organic Chemistry 1
CHEM 2315  Organic Chemistry 1 for Chemistry Majors  6
and CHEM 2316  and Lab for CHEM 2315

Intermediate-Level Chemistry—Organic Chemistry 2
CHEM 2317  Organic Chemistry 2 for Chemistry Majors  6
and CHEM 2318  and Lab for CHEM 2317

Intermediate-Level Chemistry 1
Chemical Synthesis Characterization and Chemical Synthesis Characterization Lab  5
Bioanalytical Chemistry
CHEM 2331  Bioanalytical Chemistry  5
and CHEM 2332  and Lab for CHEM 2331

Physical Chemistry

Physical Chemistry

Chemistry Major Credit Requirement
Complete 83 semester hours in the major.

Program Requirement
136 total semester hours required

Plan of Study
Five Years, Three Co-ops in Summer 2/Fall

Year 1
Fall  Hours Spring  Hours Summer 1  Hours Summer 2  Hours
Elective  4  CHEM 1220  4  Vacation  0  Vacation  0
MATH 1341  4  CHEM 1221  2
ENGW 1111  4  CHEM 1222  0
CHEM 1217  4  PHYS 1151  3
CHEM 1218  2  PHYS 1152  1
CHEM 1219  0  PHYS 1153  1
CHEM 1000  1  MATH 1342  4
Elective  4
19  19  0  0

Year 2
Fall  Hours Spring  Hours Summer 1  Hours Summer 2  Hours
CHEM 2315  4  CHEM 2317  4  Vacation  0  Co-op  0
CHEM 2316  2  CHEM 2318  2
PHYS 1155  3  CHEM 4628  4
### Year 3

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Total Hours: 138