

QUEENS COLLEGE

Chemistry 7-12 BA Chemistry Education

Four-Year Academic Plan

15 Required Core Credits

22 Flexible Core Credits

15 College Option Credits

64 Major Credits

4 Elective Credits

The purpose of this 4-year-plan is to help students graduate in four years. Students are encouraged to take Winter and Summer courses. This suggested sequence is NOT a substitute for students' responsibility to meet with a faculty advisor or departmental representative to continue and formalize the discussion to include identification of the exact coursework, sequence thereof, necessary prerequisites, and entrance and maintenance criteria (if applicable) for successful completion of their chosen field(s) of study.

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Four-Year Academic Plan

| FRESHMAN | FALL | | SPRING | |
|----------|--|------|---|------|
| | ENGL 110 (Required Core EC1) | 3 CR | SEYS 221 Development and Learning in Middle Child and Adolescence | 3 CR |
| | MATH 122 (Required Core MQR) Precalculus | 4 CR | MATH 151 Calculus I | 4 CR |
| | CHEM 113.4 and 113.1 (Required Core LPS) General Chemistry I | 5 CR | CHEM 114.4 and 114.1 (Flexible Core SW) General Chemistry II | 5 CR |
| | Flexible Core | 3 CR | BIOL 105 General Biology Physiology and Cell Biology (College Option SCI) | 4 CR |
| | | | | |

15 Fall credits + 16 Spring credits = 31 credits

| SOPHOMORE | FALL | | SPRING | |
|-----------|---|------|--|------|
| | CHEM 251.4 and 251.1 (Flexible Core SW) Organic Chemistry I | 5 CR | CHEM 252.4 and 252.1 Organic Chemistry II | 5 CR |
| | MATH 152 Calculus II | 4 CR | PHYS 146.4 and 146.1 Principles of Physics II | 5 CR |
| | PHYS 145.4 and 145.1 (College Option LPS) Principles of Physics I | 5 CR | SEYS 201W Historical, Social, and Philosophical Foundations of Education | 3 CR |
| | Flexible Core | 3 CR | Required Core College Writing 2 (EC2) | 3 CR |
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31 Prior Credits + 17 Fall Credits + 16 Spring Credits = 64 Credits

QUEENS COLLEGE

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Pathways Four-Year Academic Plan

| JUNIOR | FALL | | SPRING | |
|--------|---|------|--|------|
| | CHEM 341.3 and 341.1 Instrumental Methods | 4 CR | CHEM 371 Biochemistry I | 4 CR |
| | CHEM 211 Chemical Thermodynamics and Kinetics | 4 CR | CHEM 321.3 Practicum in Chemical Education | 3 CR |
| | SEYS 340 Language, Literacy, and Culture in Education | 3 CR | SEYS 350 Cognition, Technology, and Instruction for Diverse Learners | 3 CR |
| | Flexible Core | 3 CR | SEYS 362 Methods of Teaching Science in Middle and High School | 3 CR |
| | | | | |

64 Prior Credits + 14 Fall Credits + 13 Spring Credits = 91 Credits

| SENIOR | FALL | | SPRING | |
|--------|---|------|---|------|
| | CHEM 331.3 and 331.1 Inorganic Chemistry | 4 CR | SEYS 372.4 Student Teaching Clinical Experience in Science for Secondary School | 3 CR |
| | SEYS 372.2 Student Teaching Initial Clinical Experience in Science for Secondary School | 3 CR | ECPSE 350 Foundations of Special Education | 3 CR |
| | SEYS 382 Curriculum and Assessment in Teaching Science | 3 CR | College Option (LIT) | 3 CR |
| | College Option (LANG) | 3 CR | Flexible Core | 3 CR |
| | Elective | 4 CR | | |

91 Prior Credits + 17 Fall Credits + 12 Spring Credits = 120 Credits

****Electives:** Students may complete the remaining credits needed for their degree by taking courses in any department they choose.

Such courses are called electives and do not require faculty approval; however, depending on the course, students may need to have department permission or have taken prerequisite courses. Electives may be used to supplement the major (an English major may want to take a course in French or Italian literature) or to fulfill interest in a different area (an English major may be fascinated by mathematics and choose electives in that department). If professional requirements also must be met, as for secondary school teaching or medical school candidates, electives will provide the additional credits necessary (Queens College Undergraduate Bulletin, 42, 2014-2015).