

CHEMISTRY PRE-MAJOR

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The following pre-major is recommended for students who are considering completing a Bachelor's degree in Chemistry after transferring to a four-year institution. It is designed for students who have not decided upon a specific four-year college or university. Once a transfer school is selected, students are strongly encouraged to consult the Office of Advising, Transitions, and Student Success and the transfer institution's catalog to select courses that will meet both Oakton and transfer institution requirements.

For more information on course selection or program-specific advising, contact the department chair. Part time students should also consult the Office of Advising, Transition, and Student Success for part-time pre-major recommendations. **General Education courses should be selected from the list of IAI General Education Courses.**

| Course | Title | Hours |
|--|---|--------------|
| First Year | | |
| Semester One | | |
| EGL 101 | Composition I | 3 |
| CHM 121 | General College Chemistry I | 4 |
| BIO 121 | General College Biology I | 4 |
| MAT 250 | Calculus I | 5 |
| Hours | | 16 |
| Semester Two | | |
| EGL 102 | Composition II | 3 |
| SPE 103 | Effective Speech | 3 |
| MAT 251 | Calculus II | 4 |
| CHM 122 | General College Chemistry II | 4 |
| Select one Social and Behavioral Sciences course ¹ | | 3 |
| Hours | | 17 |
| Second Year | | |
| Semester One | | |
| PHY 221 | General Physics I | 5 |
| Select one of the following: | | 4-5 |
| CHM 221 | Organic Chemistry I ^{2,3} | |
| CHM 223 | Organic Chemistry I ⁴ | |
| Select one Social and Behavioral Sciences course from a discipline not taken previously ¹ | | 3 |
| Select one Modern Language (202 ⁵ or higher) or Humanities course ¹ | | 3-4 |
| Hours | | 15-17 |
| Semester Two | | |
| PHY 222 | General Physics II | 5 |
| Select one of the following: | | 4-5 |
| CHM 222 | Organic Chemistry II ^{2,3} | |
| CHM 224 | Organic Chemistry II ⁴ | |
| Select one Fine Arts course ¹ | | 3 |
| Select one of the following: | | 3-4 |
| BIO 122 | General College Biology II | |
| CHM 229 | Biochemistry | |
| CHM/BIO 240 | Interdisciplinary Undergraduate Laboratory Research ² | |
| MAT 252 | Calculus III | |
| MAT 260 | Introduction to Linear Algebra | |
| MAT 262 | Ordinary Differential Equations | |
| CSC 170 & CSC 171 | Introduction to Numerical Methods and C++ Programming for Engineers | |
| CSC 170 & CSC 172 | Introduction to Numerical Methods and FORTRAN Programming for Engineers | |
| CSC 170 & CSC 173 | Introduction to Numerical Methods and Java Programming for Engineers | |

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| CSC 170 & CSC 174 | Introduction to Numerical Methods and Python Programming for Engineers | |
| Hours | | 15-17 |
| Total Hours | | 63-67 |

- ¹ When choosing Social and Behavioral Studies and Humanities/Fine Arts courses, please select at least one course that also satisfies Global Studies requirement and one course that also satisfies the U.S. Diversity requirement.
- ² Students who took CHM 221 Organic Chemistry I and CHM 222 Organic Chemistry II, and choose CHM 240 Interdisciplinary Undergraduate Laboratory Research, may need to take an additional course to meet 60-credit-hour minimum for degree completion.
- ³ Typically offered in summer.
- ⁴ Typically offered in fall and spring.
- ⁵ Transfer institutions may have a language requirement. Any Modern Language Intermediate II course can meet the Humanities and Global Studies requirements.

Note: Pre-major is a recommended sequence and selection of courses. See Associate in Science (A.S.) page for degree requirements.