Required Semester Hours:  
B.A.: 34 semester hours + 4 prerequisite semester hours  
B.S.: 42 semester hours + 16 prerequisite semester hours

Prerequisites and Supporting Courses:

**B.A.: 4 semester hours**
- MATH 1150: Pre-Calculus Mathematics (4) - meets Analytical & Quantitative Reasoning Requirement

**B.S.: 16 semester hours**
- MATH 1510: Calculus I (4) - meets Analytical & Quantitative Reasoning Requirement  
- MATH 1520: Calculus II (4)

**Both B.A. & B.S Degree** - Select one of the following options:

Option 1:  
- PHEN 1110: College Physics I (4) (offered only during the summer term)  
- PHEN 1120: College Physics II (4) (offered only during the summer term)

Option 2:  
- PHEN 1210: Introductory Physics I (4) (offered only during the academic year)  
- PHEN 1220: Introductory Physics II (4) (offered only during the academic year)

Required Core Courses: B.A. 22 semester hours, B.S. 34 semester hours

**Both B.A. & B.S Degrees**
- CHEM 1150: General Chemistry I (4) - meets Physical Science Requirement  
- CHEM 1160: General Chemistry II (4)  
- CHEM 2310: Organic Chemistry I (4)  
- CHEM 2320: Organic Chemistry II (4)  
- CHEM 2410: Analytical Chemistry (4)  
- CHEM 3010: Chemistry Ethics, Skill, and Professional Practices (2) - meets Ethical Reasoning Requirement  
- CHEM 4020 (3 times): Chemistry Seminar Series (must be taken 3 times pass/fail, 0 semester hours)

**B.S. Degree Additional Courses Required**
- CHEM 2160: Inorganic Chemistry (4)  
- CHEM 3250: Physical Chemistry: Thermodynamics and Kinetics (4) - meets Research Writing Course Requirement  
- CHEM 3260: Physical Chemistry: Quantum Chemistry and Spectroscopy (4)

Electives:

**B.A.: 12 semester hours**
- Chemistry courses numbered 2000 and above (4)  
- Chemistry courses numbered 2000 and above (4)  
- Chemistry courses numbered 3000 and above (4)

**B.S.: 8 semester hours**
- Chemistry courses numbered 2000 and above (4)  
- Chemistry courses numbered 3000 and above (4)

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ACADEMIC PLANNING GUIDE - CHEMISTRY
Effective with 2018-2019 Catalog

CORE CURRICULUM

Starting with the framework of North Park’s identity as a Christian, liberal arts institution, our Core Curriculum is intentionally multi-disciplinary and multi-year. It is set up as a progress through three areas: Foundation Courses, Explorations Courses, and Capstone Courses.

http://www.northpark.edu/Academics/Undergraduate-Studies/Core-Curriculum

Foundations
Preparing for more in-depth work in both the Core Curriculum and your major

- Cornerstone Seminar (4sh)
- Biblical Studies (4sh)
- Health and Well-Being (2sh)
- Analytical & Quantitative Reasoning (4sh)  
  *met by MATH 1150 (B.A. only) or MATH 1510 (B.S. only)*
- Global Histories (4sh)
- Modern Languages (8sh)

Explorations
Knowledge in specific disciplines, with strong emphasis on how you can use them in the context of your own life

- Art and Aesthetics (2sh)
- Christian Life & Thought (4sh)
- Life Science (2sh/lab)
- Physical Science (2sh/lab)  
  *met by CHEM 1150*
- Culture and Society (4sh)
- Ethical Reasoning (2sh)  
  *met by CHEM 3010*

Intermediate Level Writing
Two courses in the context of your major that specifically address writing clearly and doing effective research

- Writing Intensive Course (4sh)
- Research Writing Course (4sh)  
  *met by CHEM 3250 (B.S. only)*

Keystone
Interdisciplinary integration of skills and knowledge applied to contemporary social issues

- Keystone Seminar (4sh)

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