

Chemistry Major with a Biochemistry Concentration

Major Academic Plan (MAP) for Catalog Year 2023-2024

Total Major hours: 52
Suggested hours per semester: 16-18

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes. Student course sequencing may vary depending on course offerings and other variables.

<p>Fall Semester 1 CHEM 231: General Chemistry I^F or CHEM 341: Organic Chem. I^{*,F} MATH 235: Calculus I^{*,1}</p> <p>CORE 101: First Year Seminar First-Year CATC options- <ul style="list-style-type: none"> ▪ COMM 101: Oral Comm (2) ▪ ENGW 103: First-Year Writing ▪ Language Core Competency or Thematic Core Course </p>	<p>Spring Semester 1 CHEM 232: General Chemistry II^{*,S} or CHEM 342: Organic Chem. II^{*,S} MATH 235: Calculus I^{*,} if not complete</p> <p>First-Year CATC options Language Core Competency BITH 211/ARCH 211: Old Testament</p>	<p>Summer 1</p> <p><i>Consider study, internship or research options – Wheaton In summer program, WIN (HoneyRock), Wheaton in the Black Hills, non-major internship, summer research</i></p>
<p>Fall Semester 2 CHEM 341: Organic Chemistry I^{*,F}, if not complete CHEM 294: Chem. Colloquium (1)² PHYS 221: General Physics I^{1*,F} or 231: Introductory Physics I^{1*,F}</p> <p>Core Competency Courses (4-8) BITH 213/ARCH 213: New Testament</p>	<p>Spring Semester 2 CHEM 342: Organic Chemistry II^{*,S}, if not complete CHEM 294: Chem. Colloquium (1)² PHYS 222: General Physics II^{*,S} or 232: Introductory Physics II^{*,S}</p> <p>BITH 315: Christian Thought[*]</p>	<p>Summer 2</p> <p><i>Consider study, internship or research options.</i></p>
<p>Fall Semester 3 CHEM 355: Intro. to Analytical Chem. (2)^{*,F} CHEM 371: Physical Chem. I^{*,F}</p> <p>Thematic Core Course (4-8) Advanced Integrative Seminar?[*]</p>	<p>Spring Semester 3 CHEM 336: Inorganic Chemistry^{*,S} CHEM 461: Gen. Biochemistry^{*,S} CHEM 455: Adv. Analytical I (2)^{*,S,3}</p> <p>Thematic Core Course Advanced Integrative Seminar?[*]</p>	<p>Summer 3</p> <p><i>Consider study, internship or research options.</i></p>
<p>Fall Semester 4</p> <p>CHEM 494: Chemistry in Context (2)[*] CHEM 462: Adv. Biochemistry (2)^{*,F} CHEM 457: Adv. Analytical II (2)^{*,F,3} if 455 has not been taken yet</p> <p>Thematic Core Course (4-8) Complete CATC Coursework</p>	<p>Spring Semester 4</p> <p>CHEM 463: Biochemistry Analysis (2)^{*,S} CHEM 455: Adv. Analytical I (2)^{*,S,3} if neither 455 or 457 been taken yet</p> <p>Thematic Core Course Complete CATC Coursework</p>	<p>Summer 4</p>

Notes or Special Guidance for Majors:

* Course has prerequisite

^F Fall only course

^S Spring only course

¹ Classes that meet CATC tags: MATH 231 (AAQR), PHYS 231 (SP)

² CHEM 294 has two distinct courses that should be taken in order: first the fall course, followed by the spring course

³ A big difference between the Basic Major and the Biochemistry Emphasis major is one can get by with only one semester of calculus and take algebra-based physics (PHYS 221/2). Beyond that, there are no electives in the major, other than which one of the two Adv. Analytical courses is taken: CHEM 455 or CHEM 457.