

CHEMISTRY BS (ACS)

Bachelor of Science (BS)

This degree map is based on the 2023-24 Academic Catalog and is subject to change. Students should meet with their academic advisor each semester and use Degree Works to monitor their individual progress toward degree completion. The time it takes to earn a degree will vary based on several factors including summer/winter enrollment, dual enrollment and number of courses successfully completed each semester. We recommend taking a minimum of 15 credits each fall and spring semester.

Sample 4-Year Plan

First Year

Fall Courses	Credits	Spring Courses	Credits
MATH 160 Calculus I (General Education)	4	MATH 170 Calculus 2	4
CHEM 121 General Chemistry 1 (General Education)	4	CHEM 122 General Chemistry 2 (General Education)	4
General Education Course	3	PHYS 211 General Physics 1 (General Education)	4
General Education Course -- First Year Seminar	3	General Education Course	3
Semester Total	14	Semester Total	15

Second Year

Fall Courses	Credits	Spring Courses	Credits
CHEM 281 Organic Chemistry 1	4	CHEM 282 Organic Chemistry 2	4
PHYS 212 General Physics 2	4	CHEM 261 Inorganic Chemistry	4
General Education Course	3	General Education Course	3
Free Elective	3	Free Elective	3
General Education Course	3	Free Elective	3
Semester Total	17	Semester Total	17

Third Year

Fall Courses	Credits	Spring Courses	Credits
CHEM 341 Quantitative Analysis	4	CHEM 351 Biochemistry 1	4
CHEM 371 Physical Chemistry 1	4	CHEM Elective	4
General Education Course	3	General Education Course	3
Free Elective	3	Free Elective	3
Semester Total	14	Semester Total	14

Fourth Year

Fall Courses	Credits	Spring Courses	Credits
CHEM Elective	4	CHEM Elective	4
General Education Course	3	CHEM Research or Internship	1
Free Elective	3	General Education Course	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	2
Semester Total	16	Semester Total	13

Winter/Summer College - Optional

While not required, Winter and Summer sessions are offered each year and may help you stay on track or get ahead. You may take up to seven (7) credits during Winter College and up to 14 credits during Summer College.

Curriculum Checklist

Fall 2023 Commonwealth Courses (48 credits)

- ___ CHEM 121 General Chemistry 1 (N) (4)
- ___ CHEM 122 General Chemistry 2 (N) (4)
- ___ CHEM 281 Organic Chemistry 1 (4)
- ___ CHEM 282 Organic Chemistry 2 (4)
- ___ CHEM 261 Inorganic Chemistry (4)
- ___ CHEM 341 Quantitative Analysis (4)
- ___ CHEM 371 Physical Chemistry 1 (4)
- ___ CHEM 351 Biochemistry 1 (4)
- ___ MATH 160 Calculus 1 (Q) (4)
- ___ MATH 170 Calculus 2 (4)
- ___ PHYS 211 General Physics 1 (N) (4)
- ___ PHYS 212 General Physics 2 (4)

Fall 2023 Commonwealth Elective Courses

A. Category A (Choose 1 Credit)

- ___ CHEM 492 Chemistry Research 1 (1)
- ___ CHEM 498 Chemistry Internship (1)

B. Category B (12 Credits)

- ___ CHEM 442 Instrumental Analysis (4)
- ___ CHEM 472 Physical Chemistry 2 (4)
- ___ CHEM 462 Advanced Inorganic Chemistry (4)
- ___ CHEM 452 Biochemistry 2 (4)

General Education Requirements

(45 credits)

Note: Some requirements may be fulfilled by coursework in your major program including directed Gen Ed courses noted below

- Foundations (15 credits)
 - FYS (U): FYS100 First Year Seminar
 - Writing (W):
 - Oral Comm. (O):
 - Quantitative (Q): MATH160 Calculus 1
 - History (H):
- Interconnections (9 credits)
 - Diversity (D):
 - Global Perspectives. (G):
 - D or G or Foreign Lang. (F):
- Citizenship & Responsibility (6 credits from at least two goals)
 - Goal 1: Citizenship (S):
 - Goal 2 Ethical Reasoning (E):
 - Goal 3: Crit. Reasoning (R):
- Natural World & Technologies (9 credits)
 - Natural World (N): CHEM121 General Chemistry 1
 - Natural World (N): CHEM122 General Chemistry 2
 - Technology (T): PHYS211 General Physics 1
- Creativity & Expression (6 credits)
 - Literature (L):
 - Arts (A) or Creativity (C):

Degree Requirements

All students must obtain a minimum of 120 credits, complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements.

A minimum GPA of 2.0 in the major and overall are required.

Campus Locations

- | | |
|-------------------|--|
| Bloomsburg | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| Lock Haven | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| Mansfield | <input type="checkbox"/> Online; <input checked="" type="checkbox"/> In-person; <input type="checkbox"/> Blended |
| Clearfield | <input type="checkbox"/> Online; <input type="checkbox"/> In-person; <input type="checkbox"/> Blended |