

Chemistry, B.A.

Learn more about the Bachelor of Arts in Chemistry (<https://www.temple.edu/academics/degree-programs/chemistry-major-st-chem-bs>).

The Bachelor of Arts in Chemistry is designed for students who are planning for a non-research career in a field related to Chemistry. Students learn a wide array of topics in Chemistry, Mathematics, and Physics. Students learn how to write scientific reports, analyze data, and place these results in a broader scientific context.

Undergraduate Contact Information:

Dr. Dan Strongin, Chair
Beury Hall, Room 130
215-204-7118

Dr. Ann Valentine, Vice Chair
Beury Hall, Room 352
215-204-7118

Dr. Steven Fleming, Faculty Advisor (Last names A-C)
Beury Hall, Room 344
215-204-0359
sfleming@temple.edu

Dr. Roy Keyer, Faculty Advisor (Last names D-G)
Beury Hall, Room 440
215-204-7286
roy.keyer@temple.edu

Dr. Spiridoula Matsika, Faculty Advisor (Last names H-K)
Beury Hall, Room 242
215-204-7703
spiridoula.matsika@temple.edu

Dr. Andrew Price, Faculty Advisor (Last names L-M)
Beury Hall, Room 222C
215-204-1048
acprice@temple.edu

Dr. Vince Voelz, Faculty Advisor (Last names N-R)
Beury Hall, Room 240
215-204-1973
vincent.voelz@temple.edu

Dr. Vladi Wilent, Faculty Advisor (Last names S-T)
Beury Hall, Room 440
215-204-7186
vladi.wilent@temple.edu

Dr. Michael Zdilla, Faculty Advisor (Last names U-Z)
SERC, Room 656
215-204-7886
michael.zdilla@temple.edu

Note: Due to restricted access to the 6th floor of SERC, please email Dr. Zdilla to set up an appointment.

Bachelor of Arts

Summary of Requirements for the Degree

1. University Requirements (123 total s.h.)
 - MATH 0701 (4 s.h.) and/or ENG 0701 (4 s.h.), if required by placement testing.
 - All Temple students must take a minimum of two writing-intensive courses in their major at Temple. For Chemistry majors, one must be CHEM 4196 and the second should be either CHEM 3397 or CHEM 3398.
 - Students must complete the General Education (GenEd) requirements.

- See the General Education (<http://bulletin.temple.edu/undergraduate/general-education>) section of the *Undergraduate Bulletin* for the GenEd curriculum.
- Students who complete CST majors typically receive a waiver for 2 Science & Technology (GS) and 1 Quantitative Literacy (GQ) GenEd courses.
- Students must satisfy general Temple University residency requirements (<http://bulletin.temple.edu/undergraduate/academic-policies/academic-residency-requirements>).

2. College Requirements

- 45 Upper Level (2000+) credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- 90 credits within the College of Science & Technology (CST) or the College of Liberal Arts (CLA).
- Two (2) Upper Level (2000+) Liberal Art courses.
- Second (2nd) Level of a Foreign Language (1002).

3. Major Requirements for Bachelor of Arts (53 s.h.)

At least 7 courses required for the major must be completed at Temple. At least 5 Chemistry courses must be completed at Temple.

Code	Title	Credit Hours
Chemistry		
Select one of the following:		4
CHEM 1031 & CHEM 1033	General Chemistry I and General Chemistry Laboratory I	
CHEM 1951 & CHEM 1953	Honors General Chemical Science I and Honors Chemical Science Laboratory I (F)	
Select one of the following:		4
CHEM 1032 & CHEM 1034	General Chemistry II and General Chemistry Laboratory II	
CHEM 1952 & CHEM 1954	Honors General Chemical Science II and Honors Chemical Science Laboratory II (S)	
Select one of the following:		4
CHEM 2201 & CHEM 2203	Organic Chemistry I and Organic Chemistry Laboratory I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I and Organic Majors Laboratory I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I and Organic Honors Laboratory I (F)	
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II and Organic Chemistry Laboratory II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II and Organic Majors Laboratory II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II and Organic Honors Laboratory II (S)	
CHEM 3103 & CHEM 3105	Techniques of Chemical Measurement I and Introduction to Chemical Research Techniques	4
CHEM 3301	Physical Chemistry Lecture I	3
CHEM 3302	Physical Chemistry Lecture II	3
CHEM 4196	Techniques of Chemical Measurement II	5
CHEM 3397 or CHEM 3398	Physical Chemistry Laboratory I Physical Chemistry Laboratory II	2
Mathematics		
MATH 1041 or MATH 1941	Calculus I Honors Calculus I	4
MATH 1042 or MATH 1942	Calculus II Honors Calculus II	4
MATH 2043 or MATH 2943	Calculus III Honors Calculus III	4
Physics		

Select one of the following:	4
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PHYS 1061	Elementary Classical Physics I	
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PHYS 1961	Honors Elementary Classical Physics I (F)	
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PHYS 2021	General Physics I	
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PHYS 2921	Honors General Physics I (F)	
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Select one of the following:	4
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PHYS 1062	Elementary Classical Physics II	
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PHYS 1962	Honors Elementary Classical Physics II (S)	
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PHYS 2022	General Physics II	
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PHYS 2922	Honors General Physics II (S)	
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Total Credit Hours	53
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Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

Calculation of Major GPA

Courses listed under the major requirements for the degree will be included in the calculation of the major GPA. Courses that could not apply toward the major as an elective or required course would not be counted in the calculation of the major GPA. This would include CHEM 1027, for example.

Distinction in Major

To graduate with Distinction in Major, students are required to achieve a 3.33 GPA or higher in all the Chemistry courses in their major.

Suggested Academic Plan

All prospective majors should schedule an appointment with one of the departmental advisors (names of current Faculty Advisors are available in the About section) to plan a program of study. The recommended order of courses for the major is listed below; a different order is acceptable as long as the student adheres to prerequisite requirements.

Bachelor of Arts in Chemistry

Requirements for New Students starting in the 2018-2019 Academic Year

Year 1

Fall	Credit Hours
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Select one of the following:	4
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CHEM 1031	General Chemistry I	
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& CHEM 1033		
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CHEM 1951	Honors General Chemical Science I (F)	
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& CHEM 1953		
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MATH 1041 or 1941	Calculus I	4
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General Education/Elective Credits	7
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Term Credit Hours	15
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Spring

Select one of the following:	4
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CHEM 1032	General Chemistry II	
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& CHEM 1034		
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CHEM 1952	Honors General Chemical Science II (S)	
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& CHEM 1954		
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MATH 1042 or 1942	Calculus II	4
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General Education/Elective Credits	7
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Term Credit Hours	15
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Year 2

Fall	
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Select one of the following:	4
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CHEM 2201 & CHEM 2203	Organic Chemistry I	
CHEM 2211 & CHEM 2213	Organic Chemistry for Majors I (F)	
CHEM 2921 & CHEM 2923	Organic Chemistry for Honors I (F)	
Select one of the following:		4
PHYS 1061	Elementary Classical Physics I	
PHYS 1961	Honors Elementary Classical Physics I (F)	
PHYS 2021	General Physics I	
PHYS 2921	Honors General Physics I (F)	
MATH 2043 or 2943	Calculus III	4
General Education/Elective Credits		3
	Term Credit Hours	15
Spring		
Select one of the following:		4
CHEM 2202 & CHEM 2204	Organic Chemistry II	
CHEM 2212 & CHEM 2214	Organic Chemistry for Majors II (S)	
CHEM 2922 & CHEM 2924	Organic Chemistry for Honors II (S)	
Select one of the following:		4
PHYS 1062	Elementary Classical Physics II	
PHYS 1962	Honors Elementary Classical Physics II (S)	
PHYS 2022	General Physics II	
PHYS 2922	Honors General Physics II (S)	
General Education/Elective Credits		8
	Term Credit Hours	16
Year 3		
Fall		
CHEM 3301	Physical Chemistry Lecture I	3
General Education/Elective Credits		12
	Term Credit Hours	15
Spring		
CHEM 3103	Techniques of Chemical Measurement I ¹	3
CHEM 3105	Introduction to Chemical Research Techniques ¹	1
CHEM 3302	Physical Chemistry Lecture II	3
General Education/Elective Credits		9
	Term Credit Hours	16
Year 4		
Fall		
CHEM 4196	Techniques of Chemical Measurement II [WI]	5
General Education/Elective Credits		11
	Term Credit Hours	16
Spring		
Select one of the following:		2
CHEM 3397	Physical Chemistry Laboratory I [WI]	
CHEM 3398	Physical Chemistry Laboratory II [WI]	
General Education/Elective Credits		13
	Term Credit Hours	15
	Total Credit Hours:	123

Code	Title	Credit Hours
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(F) - Fall only course

(S) - Spring only course

¹ It is strongly encouraged that CHEM 3103/CHEM 3105 be taken before all chemistry laboratory courses numbered above 3105.