

- B.S. in Chemistry
- <u>Standard Option</u>
- Degree Requirements

B.S. in Chemistry Description

The B.S. in chemistry provides a rigorous foundation in the principal areas of basic chemistry. This program is designed for students who intend to pursue advanced studies leading to the M.S. or Ph.D. degrees in the chemical or biochemical sciences, or who wish to obtain employment as entry-level professional chemists in industrial or government laboratories. Students who intend to seek admission to combined M.D.-Ph.D. programs are advised to consider this degree program.

Minimum Total Credit Hours: 124 General Education Requirements

See the 'General Education/Core Curriculum' for the College of Liberal Arts.

Course Requirements

A major in chemistry for the B.S. degree consists of the following 47 hours of chemistry courses: Chem 105, 106, 115, 116; 221, 222, 225, 226; 314; 331, 332, 337; 401, 402; 415 (or Csci 251), 423, 469, 471, two semesters of 463, and an advanced course chosen from 473, 512, 514, 519, 527,528, 529, 530, 531, 532, 534, 536, 544, or 563. Math 261, 262, 263, 264, and either 353 or 319 as well as Phys 211, 212, 221, 222 are also required. The following courses may not be used for major credit: Chem 101, 103, 104, 113, 114, 121, 201, 202, 271, 381, 382, or 383.

Standard Option Degree Requirements

The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

General Education

REQUIREMENT	HOURS	DESCRIPTION
First Year Writing I	3	Complete <u>Hon 101</u> , <u>Writ 100</u> or <u>Writ 101</u> with a passing grade.
First Year Writing II	3	Complete one of the following courses with a passing grade: Liba 102, Writ 102 or Hon 102.
3 hrs fine arts	3	The course may be chosen from art history, music, dance, and theatre arts. Studio and workshop courses cannot be used to satisfy this requirement. Courses that satisfy this requirement are any Art History (AH); Liba 130, 204, 314; Mus 101, 102, 103, 104, 105; Danc 200; Thea 201, 202. Students who have completed 30 semester hours of undergraduate course work may fulfill the requirement with a 300- or 400-level art history course.
6 hrs literature survey	6	Complete 6 hours of literature survey with a passing grade. Choose from the following courses: Eng 220, 221, 222, 223, 224, 225, or Eng 226.
6 hrs modern/ancient language 200+	6	Successfully complete at least 6 hours at the 200 level or above in one modern or ancient language.
6 hrs social science	6	Successfully complete 6 semester hours in anthropology, economics, political science, psychology, or sociology.
6 hrs social science/humanities	6	Complete 6 hrs social science/humanities with a passing grade. The courses may be chosen from African American studies, American Sign Language, anthropology, classical civilization, economics, <u>Envs 101</u> , gender studies, Greek, history, Latin, <u>Liba 202</u> , <u>312</u> , linguistics, any of the languages offered by the Deprtment of Modern Languages, philosophy, political science, psychology, religious studies, sociology, and Southern studies; any 3 credit spch, <u>Rhet 201</u> or Writ at the 200 level or higher.
6 hrs science	6	Successfully complete 2 courses of laboratory science.
2 science labs	8	Successfully complete at least two science laboratory courses.

General Education II

REQUIREMENT	HOURS	DESCRIPTION
Related subjects residence	6	Students must complete at least 6 of the required 18 hours of related subject course work in residence.
Related subjects residence GPA		Student must acheive a GPA of 2.00 in resident hours in related subjects.
Related subjects	18	Complete at least 18 credit hours in the following areas: math or physics.
Related subject GPA		Student must achieve a GPA of 2.00 overall in the related subjects.

Major Requirements

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.





REQUIREMENT	HOURS	DESCRIPTION
Chem 105 and 115	3	Chem 105: General Chemistry I
Chem 106 and 116	3	Chem 106: General Chemistry II
Chem 105 and 115	1	Chem 115: General Chemistry Laboratory I
Chem 106 and 116	1	Chem 116: General Chemistry Laboratory II
Chem 221 and 225	4	Chem 221: Elementary Organic Chemistry I, Chem 225: Elementary Organic Chem. Laboratory I
Chem 222 and 226	4	Chem 222: Elementary Organic Chemistry II, Chem 226: Elementary Organic Chem. Laboratory II
<u>Chem 314</u>	4	Chem 314: Quantitative Analysis
Chem 331 and 337	3	Chem 331: Physical Chemistry I
<u>Chem 332</u>	3	Chem 332: Physical Chemistry II
Chem 331 and 337	1	Chem 337: Physical Chemistry Laboratory I
Chem 401 and 402	4	Chem 401: Inorganic Chemical Principles, Chem 402: Inorganic Chemical Laboratory
<u>Chem 423</u>	2	Complete <u>Chem 423</u> with a passing grade.
Chem 463 (two semesters)	4	Chem 463: Senior Research
<u>Chem 469</u>	4	Chem 469: Introduction to Instrumental Analysis
<u>Chem 471</u>	3	Chem 471: Biochemistry I
1 advanced chemistry course	3	Complete an advanced chemistry course chosen from the following: <u>CHEM 473</u> , <u>512</u> , <u>514</u> , <u>519</u> , <u>527</u> , <u>528</u> , <u>529</u> , <u>530</u> , <u>531</u> , <u>532</u> , <u>534</u> , <u>536</u> , <u>544</u> , or <u>563</u> .
Chemistry residency hrs	18	Students must earn at least 18 hours of their major courses in residence. The following courses may not be used for major or minor credit: <u>Chem 101</u> , <u>Chem 102</u> , <u>Chem 103</u> , <u>Chem 104</u> , <u>Chem 113</u> , <u>Chem 114</u> , <u>Chem 121</u> , <u>Chem 201</u> , <u>Chem 202</u> , <u>Chem 271</u> , <u>Chem 381</u> , <u>Chem 382</u> , or <u>Chem 383</u> .
Overall Major GPA		Please contact your academic advisor for grade point requirements.
Resident Major GPA		Please contact your academic advisor for grade point requirements.
Major Requirements II		
REQUIREMENT	HOURS	DESCRIPTION
<u>Math 261</u>	3	Complete Math 261 with a passing grade.
<u>Math 262</u>	3	Complete Math 262 with a passing grade.
<u>Math 263</u>	3	Complete Math 263 with a passing grade.

Complete Math 264 with a passing grade.

Complete Phys 211 with a passing grade.

Complete Phys 212 with a passing grade.

Complete Phys 221 with a passing grade.

Complete Phys 222 with a passing grade.

Complete Math 353, Math 319, or Math 375.

Successfully complete one of the following courses: Chem 415 or Csci 251.



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Math 264

Phys 211

<u>Phys 212</u>

Phys 221

Phys 222

Math 353, 319, or 375

Chem 415 / Csci 251