

CHEMISTRY, BACHELOR OF SCIENCE

Code	Title	Hours
General Education Courses		
<i>I. Communication</i>		
English:		
Select two of the following:		6
ENGL U101	Composition I	
ENGL U102	Composition II	
Speech:		
SPCH U201	Foundations in Oral Communication	3
<i>II. Mathematics, Logic & Natural Sciences</i> ^{1,2}		
Mathematics:		
MATH U141	Calculus I	4
MATH U142	Calculus II	4
Natural Science (w/ lab):		
CHEM U111 & U111L	General Chemistry and General Chemistry Lab	4
CHEM U112 & U112L	General Chemistry and Qualitative Analysis and General Chemistry and Qualitative Analysis Lab	4
<i>III. Information Technology</i>		
Information Technology:		
Select one of the following:		3
CSCI U138	Introduction to Computer Technology	
CSCI U150	Introduction to Computer Science	
INFO U101	Survey of Information Technology	
LIBR U201	Strategies for Information Discovery	
<i>IV. Fine Arts, Humanities & History</i>		
Fine Arts:		
Select one of the following:		3
ARTH U101	Introduction to Art	
ARTH U105	History of Western Art: Prehistory - Middle Ages	
ARTH U106	History of Western Art: Renaissance - Modern	
MUSC U110	Introduction to Music	
MUSC U140	History of American Popular Music	
THEA U161	Introduction to Theatre Art	
THEA U170	Fundamentals in Acting	
History:		
Select one of the following:		3
HIST U101	Introduction to World History I	
HIST U102	Introduction to World History II	
HIST U105	History of the United States to 1877	
HIST U106	History of the United States from 1865	
<i>V. Foreign Language & Culture</i>		
Foreign Language:		
Select one of the following: ³		3
ASLG U101	American Sign Language I	
FREN U101	Introductory French I	
GERM U101	Introductory German I	

SPAN U101 Introductory Spanish I

VI. Social & Behavioral Sciences

Social & Behavioral Science:

Select two of the following with two disciplines represented: 6

AFAM U201 Introduction to African American Studies

ANTH U102 Understanding Other Cultures

ECON U221 Principles of Macroeconomics

ECON U222 Principles of Microeconomics

GEOG U103 Introduction to Geography

POLI U101 American National Government

PSYC U101 Introduction to Psychology

SOCY U101 Introduction to Sociology

SPCH U210 Interpersonal Communication

WGST U101 Introduction to Women's & Gender Studies

VII. General Education Electives

General Education Electives: 0

Major Requirements

Select one of the following: 74-79

B.A. (p. 1)

B.S. (p. 2)

B.S. for ACS Certified Concentration (p. 2)

Total Hours 120

¹ A minimum grade of C or better is required.

² For MATH U141 Calculus I, students must satisfy prerequisites by math placement exam or passing MATH U126 Precalculus I and MATH U127 Precalculus II with a grade of C or better.

³ The minimum acceptable level of competency is completion of the 101 level of a language. Students who place into the 102 or higher level of a language satisfy the language requirement but will have additional hours in general education electives, if hours are required by their degree program.

Major Requirements

B.A.

Code	Title	Hours
Major Requirements ^{1,2,3}		
CHEM U321	Quantitative Analysis	3
CHEM U321L	Quantitative Analysis Laboratory	1
CHEM U331	Organic Chemistry I	3
CHEM U331L	Organic Chemistry Laboratory I	1
CHEM U332	Organic Chemistry II	3
CHEM U332L	Organic Chemistry Laboratory II	1
CHEM U541	Physical Chemistry I	3
CHEM U599	Senior Seminar	3
CHEM U511	Inorganic Chemistry	3
	or CHEM U581 Biochemistry I	
Select four credits of any 300-level or higher chemistry course not already taken		4
Supporting Courses		
CHEM U201	Science Career Catalyst	1
PHYS U201 & PHYS U202	General Physics I and General Physics II	8

or PHYS U211 Essentials of Physics I & PHYS U212 and Essentials of Physics II	
Electives or Minor	19-43
Select 19-43 elective credits	
Select 18-24 credits; 12 must be upper-division coursework	
Total Hours	77

¹ A minimum grade of C or better is required.

² To receive a chemistry degree from USC Upstate, students must complete at least 15 hours of major course credit at USC Upstate.

³ Only one credit of CHEM U499 Undergraduate Research may be used to satisfy the upper level major requirements for the B.A. degree or non-ACS Certified B.S. degree; up to 2 credits of CHEM U499 Undergraduate Research may be used for major credits for the ACS Certified B.S. degree.

⁴ Up to 6 hours (8 hours if lab courses) of General Education (<300 level) may be used to satisfy requirements of a minor.

B.S.

Code	Title	Hours
Major Requirements ^{1,2}		
CHEM U321	Quantitative Analysis	3
CHEM U321L	Quantitative Analysis Laboratory	1
CHEM U331	Organic Chemistry I	3
CHEM U331L	Organic Chemistry Laboratory I	1
CHEM U332	Organic Chemistry II	3
CHEM U332L	Organic Chemistry Laboratory II	1
CHEM U511	Inorganic Chemistry	3
CHEM U541	Physical Chemistry I	3
CHEM U542	Physical Chemistry II	3
CHEM U541L	Physical Chemistry I Laboratory	1
CHEM U542L	Physical Chemistry II Laboratory	1
CHEM U581	Biochemistry I	3
CHEM U599	Senior Seminar	3
Select seven credits of the following:		7
CHEM U371	Environmental Chemistry	
CHEM U371L	Environmental Chemistry Lab	
CHEM U499	Undergraduate Research ³	
CHEM U522	Instrumental Methods of Analysis	
CHEM U530	Spectrometric Identification of Organic Compounds	
CHEM U534	Polymer Chemistry	
CHEM U561	Medicinal Chemistry	
CHEM U582	Biochemistry II	
CHEM U583L	Biochemistry Laboratory	
Supporting Courses		
CHEM U201	Science Career Catalyst	1
PHYS U201	General Physics I	8
& PHYS U202	and General Physics II	
or PHYS U211	Essentials of Physics I	
& PHYS U212	and Essentials of Physics II	
Electives or Minor		8-32
Select 8-32 elective credits		
<i>Minor (not required to earn a degree)</i> ^{1,4}		

Select 18-24 credits; 12 must be upper-division coursework

Total Hours	77
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¹ A minimum grade of C or better is required.

² To receive a chemistry degree from USC Upstate, students must complete at least 15 hours of major course credit at USC Upstate.

³ Only one credit of CHEM U499 Undergraduate Research may be used to satisfy the upper level major requirements for the B.A. degree or non-ACS Certified B.S. degree; up to 2 credits of CHEM U499 Undergraduate Research may be used for major credits for the ACS Certified B.S. degree.

⁴ Up to 6 hours (8 hours if lab courses) of General Education (<300 level) may be used to satisfy requirements of a minor.

B.S. for ACS Certified Concentration

Code	Title	Hours
Major Requirements ^{1,2}		
CHEM U321	Quantitative Analysis	3
CHEM U321L	Quantitative Analysis Laboratory	1
CHEM U331	Organic Chemistry I	3
CHEM U331L	Organic Chemistry Laboratory I	1
CHEM U332	Organic Chemistry II	3
CHEM U332L	Organic Chemistry Laboratory II	1
CHEM U499	Undergraduate Research ³	1
CHEM U511	Inorganic Chemistry	3
CHEM U522	Instrumental Methods of Analysis	4
CHEM U541	Physical Chemistry I	3
CHEM U541L	Physical Chemistry I Laboratory	1
CHEM U542	Physical Chemistry II	3
CHEM U542L	Physical Chemistry II Laboratory	1
CHEM U581	Biochemistry I	3
CHEM U583L	Biochemistry Laboratory	1
CHEM U599	Senior Seminar	3
Select one of the following:		3
CHEM U371	Environmental Chemistry	
CHEM U530	Spectrometric Identification of Organic Compounds	
CHEM U534	Polymer Chemistry	
CHEM U561	Medicinal Chemistry	
CHEM U582	Biochemistry II	
CHEM U371L	Environmental Chemistry Lab ³	1
or CHEM U499	Undergraduate Research	
Supporting Courses		
CHEM U201	Science Career Catalyst	1
PHYS U201	General Physics I	8
& PHYS U202	and General Physics II	
or PHYS U211	Essentials of Physics I	
& PHYS U212	and Essentials of Physics II	
Electives or Minor		5-29
Select 5-29 elective credits		
<i>Minor (not required to earn a degree)</i> ^{1,4}		
Select 18-24 credits; 12 must be upper-division coursework		
Total Hours		77

- ¹ A minimum grade of C or better is required.
- ² To receive a chemistry degree from USC Upstate, students must complete at least 15 hours of major course credit at USC Upstate.
- ³ Only one credit of CHEM U499 Undergraduate Research may be used to satisfy the upper level major requirements for the B.A. degree or non-ACS Certified B.S. degree; up to 2 credits of CHEM U499 Undergraduate Research may be used for major credits for the ACS Certified B.S. degree.
- ⁴ Up to 6 hours (8 hours if lab courses) of General Education (<300 level) may be used to satisfy requirements of a minor.