

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Bachelor of Science Chemistry

FRESHMAN YEAR

	Credit
First Semester	
Chem 1-General Chemistry	4
Chem 2-General Chemistry Lab	1
Chem 4-Intro to Lab Safety Hazardous Mat	1
Chem 11-Intro to Chemistry	1
Math 8-Calculus with Analytic Geometry I	5
English 20-Exposition & Argumentation.....	3
History 112,175,176 or Political Sc 90	<u>3</u>
	18

Second Semester

Chem 3-General Chemistry	3
Chem 8-Qualitative Analysis	2
Math 21-Calculus with Analytic Geometry II	5
Electives	<u>6</u>
	16

SOPHOMORE YEAR

	Credit
First Semester	
Chem 221-Organic Chemistry I.....	4
Chem 226-Organic Chemistry I Lab	1
Math 22-Calculus with Analytic Geometry III	4
Physics 21-General Physics I	4
Physics 22-General Physics Lab.....	1
Elective.....	<u>3</u>
	17

Second Semester

Chem 223-Organic Chemistry II.....	4
Chem 228-Organic Chemistry II Lab.....	1
Physics 25-General Physics II	4
Physics 26-General Physics II Lab	1
Comp Sc 53 or Comp Sc 74 & 78-Intro to Program.....	3
Stat 213-Applied Engineering Statistics.....	<u>3</u>
	16

JUNIOR YEAR

	Credit
First Semester	
Chem 343-Intro to Quantum Chemistry	3
English 60-Writing & Research	3
Chem 361-Biochemistry.....	3
Electives	<u>6</u>
	15

Second Semester

Chem 151-Analytical Chemistry I	4
Chem 237-Inorganic Chemistry	3
Chem 238-Inorganic Chemistry Lab.....	1
Chem 241-Physical Chemistry	3
Chem 242-Physical Chemistry Lab.....	1
Chem 328-Organic Synthesis & Spec. Analysis.....	<u>3</u>
	15

SENIOR YEAR

	Credit
First Semester	
Chem 243-Physical Chemistry	3
Chem 244-Physical Chemistry Lab	1
Chem 251-Analytical Chemistry II	4
Chem 310-Undergraduate Seminar or	
Chem 390-Undergraduate Research.....	1
Chemistry Electives.....	6
Electives.....	<u>2</u>
	17

Second Semester

Chem 310-Undergraduate Seminar or	
Chem 390-Undergraduate Research.....	1
Chemistry Electives.....	7
Electives.....	<u>9</u>
	17

Notes:

Grade Requirements: Students must complete a minimum of 131 credit hours for a Bachelor of Science in Chemistry degree. A minimum grade of "C" is required for each chemistry course counted towards the degree.

ROTC: Basic ROTC may be taken in the freshman and sophomore year, but is not countable towards a degree.

Chemistry Electives: Of these thirteen (13) hours of chemistry electives, three (3) must be chosen from 300 (or 400 with permission) level chemistry courses, and ten (10) hours must be 200 level or higher in chemistry or another technical area with permission of department chairperson.

Electives: There are twenty-six (26) hours of electives. Six (6) elective hours must be completed in the social sciences. Nine (9) elective hours are required in the humanities, exclusive of foreign language. Three of the humanities hours must be literature. Three (3) of the humanities hours are to be at the 100 level or higher.

Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including scientific literature course. Recommended courses include but are not limited to the following:

- Biology, 200 and 300 level, especially 211
- Math 200 and 300 level, especially 204, 208 & 325
- Physics 200 and 300 level, especially 208, 221, 323 & 341
- Statistics, 200 & 300 level, especially 343, 346 & 353
- Ceramic Engineering 391 and 392, or Geology 381
- A foreign language series.

Students who plan to teach high school chemistry should consult the Education section of the catalog.