

# CHEMISTRY MAJOR

## Requirements

Code	Title	Credits
CHEM 1171 & 1171L	General Chemistry I and General Chemistry I Lab	4
CHEM 1172 & 1172L	General Chemistry II and General Chemistry II Lab	4
CHEM 2271 & 2271L	Organic Chemistry I and Organic Chemistry I Lab	4
CHEM 2272 & 2272L	Organic Chemistry II and Organic Chemistry II Lab	4
CHEM 2282 & 2282L	Chemical Analysis and Chemical Analysis Lab	4
CHEM/BIOL 3323L	Biochemistry Lab	1
CHEM/BIOL 3324	Biochemistry I	3
CHEM 3361 & 3361L	Physical Chemistry I and Physical Chemistry I Lab	4
CHEM 3362 & 3362L	Physical Chemistry II and Physical Chemistry II Lab	4
CHEM 3326	Chemical Instrumentation	3
CHEM 3326L	Instrumental-Analytical Chemistry Lab	3
CHEM 3341	Advanced Inorganic Chemistry	3
MATH 1141	Calculus I for Chemistry, Engineering, and Physics Majors	4
or MATH 1171	Calculus I	
MATH 1142	Calculus II for Chemistry, Engineering, and Physics Majors	4
or MATH 1172	Calculus II	
MATH 2243	Calculus III for Chemistry, Engineering, and Physics Majors	4
or MATH 2273	Multivariable Calculus	
PHYS 1171 & 1171L	General Physics I and General Physics I Lab	4
PHYS 1172 & 1172L	General Physics II and General Physics II Lab	4
<b>Total Credits</b>		<b>61</b>

## Plan of Study

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM 1171	General Chemistry I	3
CHEM 1171L	General Chemistry I Lab	1
MATH 1141	Calculus I for Chemistry, Engineering, and Physics Majors	4
or MATH 1171	Calculus I	
PHYS 1171	General Physics I	3
PHYS 1171L	General Physics I Lab	1
Core Courses		6
<b>Credits</b>		<b>18</b>

### Spring

CHEM 1172	General Chemistry II	3
CHEM 1172L	General Chemistry II Lab	1
MATH 1142	Calculus II for Chemistry, Engineering, and Physics Majors	4
or MATH 1172	Calculus II	
PHYS 1172	General Physics II	3
PHYS 1172L	General Physics II Lab	1
Core Courses		6
<b>Credits</b>		<b>18</b>

### Second Year

#### Fall

CHEM 2271	Organic Chemistry I	3
CHEM 2271L	Organic Chemistry I Lab	1
MATH 2243	Calculus III for Chemistry, Engineering, and Physics Majors	4
or MATH 2273	Multivariable Calculus	
Core Courses and Electives		9
<b>Credits</b>		<b>17</b>

#### Spring

CHEM 2272	Organic Chemistry II	3
CHEM 2272L	Organic Chemistry II Lab	1
CHEM 2282	Chemical Analysis	3
CHEM 2282L	Chemical Analysis Lab	1
Core Courses and Electives		9
<b>Credits</b>		<b>17</b>

### Third Year

#### Fall

CHEM 3326	Chemical Instrumentation <sup>1</sup>	3
CHEM 3361	Physical Chemistry I	3
CHEM 3361L	Physical Chemistry I Lab	1
Core Courses and Electives		6
<b>Credits</b>		<b>13</b>

#### Spring

CHEM 3326L	Instrumental-Analytical Chemistry Lab <sup>1</sup>	3
CHEM 3362	Physical Chemistry II	3
CHEM 3362L	Physical Chemistry II Lab	1
Core Courses and Electives		9
<b>Credits</b>		<b>16</b>

### Fourth Year

#### Fall

CHEM 3341	Advanced Inorganic Chemistry <sup>1</sup>	3
Core Courses and Electives		12
<b>Credits</b>		<b>15</b>

#### Spring

CHEM 3323L	Biochemistry Lab <sup>1</sup>	1
or BIOL 3323L	Biochemistry Lab	
CHEM 3324	Biochemistry I <sup>1</sup>	3
or BIOL 3324	Biochemistry I	
Core Courses and Electives		12
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>130</b>

2 Chemistry Major

<sup>1</sup> May be taken in either third or fourth year.

Students are encouraged to meet with their academic advisors in the Department to discuss variations of the recommended Plan of Study, for example to pursue study abroad and/or research opportunities.