

# CHEMISTRY

Students must earn a C- or higher in all prerequisite courses in order to register for a chemistry or ancillary course.

## Requirements for a Major in Chemistry

Code	Title	Credits
<b>Core (45 credits)</b>		
CH-120 & CH-121	General Chemistry I and General Chemistry II	8
CH-201 & CH-202	Organic Chemistry I (lecture) and Organic Chemistry II (lecture)	6
CH-203 & CH-204	Organic Chemistry Laboratory I and Organic Chemistry Laboratory II	4
CH-301 & CH-302	Physical Chemistry I (Lecture Only) and Physical Chemistry II (Lecture Only)	6
CH-260	Chemistry Literature Seminar	1
CH-303	Physical Chemistry Laboratory I	2
CH-210	Chemical Analysis: an Introduction to Modern Methods	5
CH-475	Chemistry Seminar	1
Plus a minimum of 12 credits at the 300 level or above, at least one of which must be a lab course. Internships and Independent Study may contribute no more than 3 credits toward this requirement.		12
<b>Ancillary Courses (16 credits)</b>		
MA-200 & MA-201	Calculus I and Calculus II	8
PY-241 & PY-242	Physics I (Mechanics) and Physics II (Electricity, Magnetism and Optics)	8
<b>Total Credits</b>		<b>61</b>

To complete a chemistry degree certified by the American Chemical Society, students should complete all of the requirements for the Chemistry Major, plus CH-340, CH-410, CH-470, CH-492, and one of the following: CH-335, CH-350, CH-355, CH-411, CH-435, CH-450, or CH-295.

By completing 6 credits of CH-492, students will also be eligible for Chemistry Honors.

## Sample Timeline for Completion of Degree

Year One		Credits
<b>Semester One</b>		
LASC	First-Year Seminar	3
EN-101	College Writing I	3
CH-120	General Chemistry I	4
MA-200	Calculus I (LASC QR or Math according to accuplacer score) <sup>1</sup>	4
LASC	Distribution Elective	3
<b>Credits</b>		<b>17</b>
<b>Semester Two</b>		
EN-102	College Writing II	3
LASC	U.S. Constitution	3
CH-121	General Chemistry II	4
MA-201	Calculus II (LASC QR or Math according to accuplacer score) <sup>1</sup>	4
LASC	Distribution Elective	3
<b>Credits</b>		<b>17</b>

### Year Two

#### Semester Three

CH-201	Organic Chemistry I (lecture)	3
CH-203	Organic Chemistry Laboratory I	2
PY-241	Physics I (Mechanics) (LASC NSP, QLAC) <sup>1,2</sup>	4
CH-210 or MA-200	Chemical Analysis: an Introduction to Modern Methods (LASC WAC) <sup>3</sup> or Calculus I	4-5
LASC	Distribution Elective	3
<b>Credits</b>		<b>16-17</b>

#### Semester Four

CH-202	Organic Chemistry II (lecture)	3
CH-204	Organic Chemistry Laboratory II	2
CH-260	Chemistry Literature Seminar	1
PY-242	Physics II (Electricity, Magnetism and Optics) (LASC NSP) <sup>1,2</sup>	4
CH3XX/4XX	Chemistry Upper-level Elective or Calculus II (if not taken previously)	3-4
LASC	Distribution Elective	3
<b>Credits</b>		<b>16-17</b>

### Year Three

#### Semester Five

CH-301	Physical Chemistry I (Lecture Only)	3
CH-303	Physical Chemistry Laboratory I	2
LASC	Distribution Elective or Chemical Analysis (if not taken previously) <sup>4</sup>	5
SELECT	Free Elective	3
SELECT	Free Elective	3
<b>Credits</b>		<b>16</b>

#### Semester Six

CH-302	Physical Chemistry II (Lecture Only)	3
CH3XX/4XX	Chemistry Upper Level Elective	3-4
LASC	Distribution Elective	3
LASC	Distribution Elective	3
SELECT	Free Elective	3
<b>Credits</b>		<b>15-16</b>

### Year Four

#### Semester Seven

CH-475	Chemistry Seminar <sup>5</sup>	2
CH3XX/4XX	Chemistry Upper Level Elective	3-4
LASC	Distribution Elective	3
SELECT	Free Elective	3
SELECT	Free Elective	3
<b>Credits</b>		<b>14-15</b>

#### Semester Eight

CH3XX/4XX	Chemistry Upper Level Elective	3-4
SELECT	Free Elective (Chemistry or other)	3-4
SELECT	Free Elective (Chemistry or other)	3-4
SELECT	Free Elective	3
<b>Credits</b>		<b>12-15</b>
<b>Total Credits</b>		<b>123-130</b>

<sup>1</sup> It is recommended that students take Calculus (MA-200/MA-201) in their first-year and calculus-based physics (PY-241/PY-242) in their second year. This gives the best preparation for physical chemistry in the third year. EN-101 satisfies LASC writing and MA-200/MA-201 satisfies QR.

<sup>2</sup> PY-241/PY-242 each satisfies NSP. CH-210 satisfies WAC.

<sup>3</sup> If not taken previously.

<sup>4</sup> 3 + 3 Pre-Pharmacy students must take Chemistry Seminar in the Fall semester of Junior year. Others take in Senior year.

<sup>5</sup> Students who have not taken Chemistry Seminar (a Capstone Experience) must take it in their senior year Fall semester.

Students are required to meet with their academic advisor to review their courses for the upcoming semester. A minimum of 120 credits is required for graduation. First-year and transfer students with 45 or fewer credits at the time of admission shall complete two academic programs (a major/major or major/minor) to qualify for graduation. For more information, please view the MajorPlus section of this catalog.