

## ***Course requirements in the Chemistry Minor Program curriculum***

**Chemistry course** requirements for the minor degree in chemistry are listed below (**minimum of 18 credit hours**):

- a. **Fundamental Course Pre-Requirements** (not counted towards the minor credit hours)
  - CHEM 101: General Chemistry I (3-4-4)
  - CHEM 102: General Chemistry II (3-4-4)
  
- b. **Core Course Requirements** (at least three courses from the following chemistry courses)
  - CHEM 201: Organic Chemistry I (3-4-4)
  - CHEM 204: Organic Chemistry II (3-0-3)
  - CHEM 212: Physical Chemistry I (3-4-4)
  - CHEM 221: Analytical Chemistry (2-4-3)
  - CHEM 236: Inorganic Chemistry I (3-4-4)
  
- c. **Upper-level Course Requirements** (at least one course)
  - CHEM 3XX or CHEM 4XX

***The following are examples***

### ***Representative Chemistry Minor Curricula***

**Example 1:** Applicable to science **Physics major**.

*Chemistry course requirements for major degree:  
CHEM 101 and CHEM 102 (8 Credit hours)*

<b>Course Requirements</b>		<b>Credit Hours</b>
<b>Core Course Requirements</b>		
Organic Chemistry I	CHEM 201	4
Physical Chemistry I	CHEM 212	4
Inorganic Chemistry I	CHEM 236	4
<b>Upper-level Course Requirements (minimum 3 Cr)</b>		
Chemistry of the Environment	CHEM 327	3
Biochemistry	CHEM 363	3
<b>Total</b>		<b>18</b>

**Example 2:** Applicable to **Engineering majors** (except the Chemical Engineering)\* **and Mathematics major.**

*Chemistry course requirements for major degree:*

*CHEM 101 (4 Credit hours)*

Course Requirements		Credit Hours
<b>Fundamental Course Pre-Requirement</b>		
General Chemistry II	CHEM 102	4**
<b>Chemistry Course Requirements</b>		
Organic Chemistry I	CHEM 201	4
Physical Chemistry I	CHEM 212	4
Analytical Chemistry	CHEM 221	3
<b>Upper-level Course Requirements (minimum 3 Cr)</b>		
Physical Chemistry II	CHEM 311	4
Instrumental Analysis for Engineers	CHEM 321	3
<b>Total</b>		<b>22</b>

\* Note that, apart from CHEM 101, CEE major students take CHEM 111 course which doesn't fulfil the CHEM 102 minimum requirement.

\*\* Can't be used for minor credit.

**Example 3:** Applicable to **Chemical Engineering** major students.

*Chemistry course requirements for major degree:*

*CHEM 101, CHEM 102, CHEM 201, CHEM 311 and CHEM 321 (19 credit hours)\**

Course Requirements		Credit Hours
<b>Core Course Requirements</b>		
Organic Chemistry I	CHEM 201	4**
Organic Chemistry II	CHEM 204	3
Inorganic Chemistry I	CHEM 236	4
<b>Upper-level Course Requirements (minimum 3 Cr)</b>		
Instrumental Analysis for Engineers	CHEM 321	3**
Polymer Chemistry	CHEM 451	3
Inorganic Chemistry II	CHEM 336	2
<b>Total</b>		<b>19</b>

\* The elective courses in Chemical Engineering program cannot be considered to meet the requirements of the Chemistry Minor Program.

\*\* Credits used from the original major requirement