

# BS-MS: CHEMISTRY

The School of Science and Engineering established the BS-MS program to offer students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree within four years and then completing an M.S. degree in the fifth year.

- Students admitted to the program will receive the unit BS/MS Scholarship which will cover the difference between Graduate and Undergraduate tuition rates
- Students are required to maintain full-time undergraduate enrollment (minimum 12 hours/ semester)
- Must be continuously enrolled from BS to MS programs (must enter graduate program the semester following completion of BS degree requirements, summer excepted)
- Students are required to maintain full-time enrollment (minimum 9 hours/semester) in the graduate phase of the program and complete the master's degree within a year of their bachelor's degree completion to continue to receive the BS/MS Scholarship

## Admission Requirements for BS-MS Program:

Students must meet the following requirements to be eligible:

- The GRE will be waived for students who meet the qualifications above and are planning to enroll in the BS/MS program
- Students must indicate their interest and apply to the program no later than the end of their junior year
- Students must complete 30 hours at UMKC prior to admission to the BS/MS program
- Students are expected to follow the recommended curriculum (although deviations are possible) and must maintain a UMKC cumulative GPA of 3.00 or higher

This program offers students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree in Chemistry within four years, and then completing an M.S. degree in Chemistry in their fifth year.

## Requirements for Graduation

### Credit Hour Requirements

The BS and MS program in Chemistry requires a minimum of the following:

- 120 Undergraduate Credit Hours
- 31 Graduate Credit Hours
- 142 Total Credit Hours (9 Hours of Overlap taken in final year of Undergraduate Program).

For additional details, please contact our Department by e-mail [sse@umkc.edu](mailto:sse@umkc.edu). ([sce@umkc.edu](mailto:sce@umkc.edu))

## 5 Year BS-MS Map

### First Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 211		4 CHEM 212R	4
CHEM 211L		1 CHEM 212LR	1
MATH 120		5 MATH 210	4
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 GECRT-SC 101, 102, or 103	3
		LIFE-SCI 201 or BIOLOGY 250 (Recommended)	1
		<b>16</b>	<b>16</b>

### Second Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 321		3 CHEM 322R	3
CHEM 321L		1 CHEM 322L	1
PHYSICS 240		5 PHYSICS 250	5
MATH 220		4 MATH 250	4

COMM-ST 110, 140, or 277		3 GECRT-SS 101, 102, 104, 105, 106, 107, 108, or 111	3
		<b>16</b>	<b>16</b>
<b>Third Year</b>			
<b>Fall Semester</b>	<b>Credits</b>	<b>Spring Semester</b>	<b>Credits</b>
CHEM 431		3 CHEM 432	3
CHEM 341WI		4 CHEM 437WI	3
CHEM 410		1 GECRT-AH 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 112, 113, or 114	3
LIFE-SCI 202 or BIOLOGY 251 (Recommended)		1 GECUE 201, 203, 204, 205, 206, or 272	3
GECDV 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, or 211		3 General Elective	3
HISTORY 101, 102, or POL-SCI 210		3	
		<b>15</b>	<b>15</b>
<b>Fourth Year</b>			
<b>Fall Semester</b>	<b>Credits</b>	<b>Spring Semester</b>	<b>Credits</b>
CHEM 382		2 CHEM 442R**	3
CHEM 367		3 CHEM 451R**	3
CHEM Major Elective 4XX**		3 Elective (CHEM 399 suggested)	3
Elective (CHEM 399 suggested)		3 General Elective	3
General Elective		3 CHEM GRD Course	3
		<b>14</b>	<b>15</b>
<b>Fifth Year</b>			
<b>Fall Semester</b>	<b>Credits</b>	<b>Spring Semester</b>	<b>Credits</b>
CHEM 5531, 5533, or 5534		3 GRD Course	3
CHEM 5521R or 5522		3 GRD Course	3
CHEM 5611		1 CHEM 5599*	3
CHEM 5599*		3	
		<b>10</b>	<b>9</b>

**Total Credits: 142**

\* This plan is for students selecting the Master of Science: Chemistry-Thesis-Based Option. Students selecting the Master of Science: Chemistry-Non-Thesis-Based Option may substitute the six credits of CHEM 5599 with additional graduate level CHEM electives to be selected with the Chemistry Graduate Program Advisor.

\*\* NOTE: 3 undergraduate courses (9 credit hours) counted toward the graduate degree for BS-MS students: Chemistry 442R, 451R, and Chemistry 400-level course