Master of Science in Chemistry

Why study chemistry?
Because understanding the atomic and molecular nature of matter informs us about ourselves and our universe, and creating and finding applications for new and modified forms of matter helps to conserve and enhance our world.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (http://catalog.ku.edu/graduate-studies) section of the online catalog.

Please consult the Departments & Programs (http://catalog.ku.edu/liberal-arts-sciences) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Prerequisites
Before beginning graduate work, students should have completed a bachelor’s degree in chemistry or a related field.

Application
Applications for admission are accepted online through the Office of Graduate Studies. Applications must include academic transcripts from all post-secondary schools attended, as well as recommendation letters from 3 individuals familiar with the applicant’s academic background and abilities. Additional materials that are strongly recommended include Graduate Record Examination scores (GRE), a resume/CV and a personal statement describing the applicant’s qualifications and reasons for pursuing a graduate degree in chemistry.

International applicants should also provide official scores from the Test of English as a Foreign Language (TOEFL).

Although the preferred submission deadline is January 15, applications must be received by April 15 to be considered for admission in the fall semester.

To apply, complete the online graduate application (http://graduate.ku.edu/application-process) and upload all requested documents.

Procedure
Completed applications are reviewed by a committee of faculty members from the Department of Chemistry. Offers of admission depend on favorable evaluation of the application materials and an expectation that the student will attain an undergraduate grade-point average of B or higher in chemistry and all other natural science and mathematics courses. Admission to the graduate program is contingent upon completion of a bachelor’s degree in chemistry (or a related field) and all other general admission requirements.

M.S. Degree Requirements
Each student must complete (with a B- or better) a distribution requirement consisting of two courses selected from the following list of introductory courses in the 4 major areas of study:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 720</td>
<td>Fundamentals and Methods of Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 730</td>
<td>Coordination and Organometallic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 740</td>
<td>Principles of Organic Reactions</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 750</td>
<td>Introduction to Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 760</td>
<td>Introduction to Chemistry in Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition, the student must also complete (with a B- or better) CHEM 701 (Laboratory Safety in the Chemical Sciences).

The minimum total credit hours required for the master’s degree is 30.

The candidate for the master’s degree must complete a thesis that does not exceed one-third of the credit hours and demands the solution of some research problem in chemistry. The remaining work may consist of additional specialized courses in chemistry or in related fields such as physics, mathematics, microbiology, biochemistry, or chemical engineering. Students completing a master’s thesis in chemical education must take EPSY 715 Understanding Research in Education and EPSY 710 Introduction to Statistical Analysis. Courses from outside the department cannot be from more than 2 departments.

At the time of the completion of the thesis, a candidate for the master’s degree must pass an oral thesis defense (examination) administered by a committee of three members of the department’s Graduate Faculty.