CHEMISTRY

http://chemistry.illinois.edu/

Head of the Department: Martin Gruebele
107 Noyes Laboratory
505 South Mathews Avenue
Urbana, IL 61801
(217) 333-0711
E-mail: chemadm@scs.uiuc.edu

Major: Chemistry
Degrees Offered: M.A., M.S., Ph.D.
Graduate Concentration: Astrochemistry (http://catalog.illinois.edu/graduate/graduate-majors/astrochemistry) (Ph.D. only)

Major: Teaching of Chemistry
Degree Offered: M.S.

Joint Degree Program: the Master of Science in Chemistry can be earned jointly with the following
Degrees Offered:
J.D. in Law
M.B.A. in Business Administration

Medical Scholars Program: Doctor of Philosophy (Ph.D.) in Chemistry and Doctor of Medicine (M.D.) through the Medical Scholars Program (http://www.med.illinois.edu/msp).

Graduate Degree Programs

The degrees offered in chemistry are the Master of Science in Chemistry, Master of Science in the Teaching of Chemistry, and Doctor of Philosophy in Chemistry. This catalog also provides information on a joint program leading to the Doctor of Philosophy in Chemical Physics (see Chemical Physics). Opportunity also exists for specializing in computational science and engineering within the department's graduate programs via the Computational Science and Engineering (CSE) Option (http://www.cse.illinois.edu).

Admission

Graduate College requirements apply. Further, applicants should have at least 25 semester hours in chemistry (properly distributed) and a grade point average of 3.0 (A = 4.0), to be considered for admission to the graduate programs. Applications from students with less than the usual preparation in chemistry or with grade point averages below 3.0 may be considered on an individual basis. In addition, we ask applicants to submit results from the Graduate Record Examination (GRE) General Test and the GRE Chemistry Subject Test.

International students whose native language is not English are required to have a minimum paper-based Test of English as a Foreign Language (TOEFL) score of 580 (237 on the computer-based test). In addition, teaching is a requirement in the chemistry graduate program, and there are special requirements for applicants whose native language is not English. The University requires a minimum Test of Spoken English (TSE) score of 50. Any applicant whose native language is not English is expected to provide TSE scores in order to receive full consideration for admission and financial aid.

Students who are currently enrolled in graduate programs at other institutions are advised that they should first complete degree work at their current institution before they will be considered for admission to the chemistry PhD program at the University of Illinois. In addition, we require a statement from the applicant and a letter from the applicant's research adviser or department head detailing the situation. Students might be admitted without a degree from their current institution under exceptional circumstances that will need to be described in detail via a letter from the applicant and a separate statement from the department head of the student's current graduate program.

Contact chemistry graduate admissions for further information. The department does not currently accept applications for the MA program.

Medical Scholars Program

The Medical Scholars Program permits highly qualified students to integrate the study of medicine with study for a graduate degree in a second discipline, including Chemistry. Students may apply to the Medical Scholars Program prior to beginning graduate school or while in the graduate program. Applicants to the Medical Scholars Program must meet the admissions standards for and be accepted into both the doctoral graduate program and the College of Medicine. Students in the dual degree program must meet the specific requirements for both the medical and graduate degrees. On average, students take eight years to complete both degrees. Further information on this program is available by contacting the Medical Scholars Program, 125 Medical Sciences Building, (217) 333-8146 or at www.med.illinois.edu/msp (http://www.med.illinois.edu/msp).

Graduate Teaching Experience

Experience in teaching is considered a vital part of the graduate program and is required as part of the academic work of all Ph.D. candidates in this program.

Financial Aid

Support for graduate students is available through fellowships and assistantships. All candidates are considered for these upon application. Graduate students making normal progress toward their degrees generally receive a tuition waiver as well as a stipend.

- Master of Science in Chemistry (http://catalog.illinois.edu/graduate/graduate-majors/chemistry/ms-chem)
- Master of Science in Teaching of Chemistry (http://catalog.illinois.edu/graduate/graduate-majors/chemistry/ms-teaching-chemistry)

Doctor of Philosophy in Chemistry

Doctoral programs are offered in a wide range of specialties, including the traditional areas of analytical, inorganic, organic, and physical chemistry as well as materials chemistry and chemical biology. The formal course requirements involve 12 or more hours of 500-level courses, plus 8 or fewer hours of 400-level courses, for a total of 20 hours in chemistry and allied relevant fields. Besides completing formal coursework, students will present a literature seminar, have a formal review of progress following the completion of coursework, pass an oral preliminary examination on research preparation, present and defend an original research proposal not related to their thesis research, and submit a thesis on original research, which is defended at a final oral examination.
## Entering with M.S./M.A. degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-</td>
<td>500-level courses in Chemistry or allied fields (max 8 at 400-level)</td>
<td>20</td>
</tr>
<tr>
<td>Seminar (CHEM 5X5)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 599</td>
<td>Thesis Research (0 min applied toward degree)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>64</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Other Requirements

1. Other requirements may overlap

- Teaching experience: 1 year
- Qualifying Exam Required: No
- Preliminary Exam Required: Yes
- Original Research Proposal: Yes
- Final Exam/Dissertation Defense Required: Yes
- Dissertation Deposit Required: Yes
- Minimum GPA: 3.0

1. For additional details and requirements refer to the department’s Graduate Programs (https://chemistry.illinois.edu/academics/graduate-studies) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook).

## Entering with approved B.S./B.A. degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-</td>
<td>500-level courses in the Chemistry or allied fields (max 8 at 400-level)</td>
<td>20</td>
</tr>
<tr>
<td>Seminar</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHEM 599</td>
<td>Thesis Research (0 min applied toward degree)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>96</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Other Requirements

1. Other requirements may overlap

- Teaching experience: 1 year
- Qualifying Exam Required: No
- Preliminary Exam Required: Yes
- Original Research Proposal: Yes
- Final Exam/Dissertation Defense Required: Yes
- Dissertation Deposit Required: Yes
- Minimum GPA: 3.0

1. For additional details and requirements refer to the department’s Graduate Programs (https://chemistry.illinois.edu/academics/graduate-studies) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook).

In order to enter the joint degree program, students must be admitted separately to each program. Each program's application requirements and deadlines for admission must be met.

- J.D. in Law and M.S. in Chemistry (http://catalog.illinois.edu/graduate/graduate-majors/chemistry/ms-chem-law)
- M.B.A. Joint Degree Program (http://catalog.illinois.edu/graduate/graduate-majors/chemistry/ms-chem-mba)