Chemistry, M.S.

COLLEGE OF SCIENCE AND TECHNOLOGY

Learn more about the Master of Science in Chemistry.

About the Program

The Chemistry graduate program is designed to provide a solid background in the chosen area of specialization. It emphasizes the acquisition of skills that enable students to gain further knowledge in their research and professional careers. For this reason, the Chemistry graduate degree program is research oriented, and seminar attendance and familiarization with the chemical literature are considered integral. The course requirements are comparatively light, although a wide variety of intermediate and advanced courses in related areas are offered. Students are encouraged to take courses in related areas, such as Biology, Computer Science, and Physics, according to their research interests.

Time Limit for Degree Completion: 3 years

Campus Location: Main

Full-Time/Part-Time Status: The degree program can be completed on a full- or part-time basis.

Interdisciplinary Study: A Chemical Physics program is offered jointly with the Department of Physics.

Areas of Specialization: The Department of Chemistry offers programs leading to the M.S. and Ph.D. degrees in Analytical Chemistry, Biochemistry, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry. Areas of specialization include environmental chemistry, materials and polymers, medicinal, nanoscience, photonics, and surface science. For the master's program, two options are offered:

- Thesis Track, which is designed for students who are not full-time. Students cannot receive financial support from the Chemistry Department when completing this option. Any student wanting to pursue this option must receive prior approval from the Graduate Committee.
- Coursework Track, which is designed for students who already have extensive experience in the laboratory and are currently employed in the local chemical industry. Students must obtain permission from the Graduate Committee to pursue this option.

Job Prospects: The majority of students find employment in the chemical industry. Some go on to academic positions or positions in government laboratories.

Non-Matriculated Student Policy: Non-matriculated students are allowed to take up to 9 credits before admission into a degree program must be sought.

Financing Opportunities: The duties of a Teaching Assistant typically involve leading recitation sections and/or overseeing laboratories, as well as grading lab assignments, tests, and quizzes, when applicable. After their first year, most students are supported by a research assistantship.

Admission Requirements and Deadlines

Application Deadline:

Fall: December 15; January 1 international
Spring: September 15; August 1 international

For Fall admissions, priority is given to applications submitted by December 15. Applications submitted after December 15 will be considered on a case-by-case basis for admissions and financial assistance.

Applications for Spring admission should be received by September 15. Note, however, that Spring admission is rare as coursework is designed to start in the Fall.

APPLY ONLINE to this graduate program.

Letters of Reference:
Number Required: 3

From Whom: Letters of recommendation should be obtained from faculty or people in industry who are familiar with the academic and/or research aptitude of the candidate.

Bachelor's Degree in Discipline/Related Discipline: A baccalaureate degree is required. Typically, the undergraduate degree has been earned in Chemistry, Biochemistry, or a related field.

Statement of Goals: Identify your specific interest in Temple's program, research goals, future career goals, and academic and research achievements.
Standardized Test Scores:
GRE: Optional

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master’s degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 88
- IELTS Academic: 6.5
- Duolingo: 110
- PTE Academic: 60

Regardless of score, all international students are required to take a SPEAK test upon arrival at Temple.

Resume: Current resume required.

Transfer Credit: All graduate credits earned by a student prior to matriculation in the Chemistry graduate program are subject to evaluation and approval by the Chemistry Graduate Committee. A "Request for Transfer of Graduate Credit" form, found in TUportal under the Tools tab within “University Forms,” must be completed. It must be supplemented with an official transcript, sent directly by the Registrar of the institution where the credits were earned. All transfer credits must be "B" or higher and must be from an accredited institution. The maximum number of credits a student may transfer is 6.

Program Requirements

General Program Requirements:
Number of Credits Required Beyond the Baccalaureate: 30

Required Courses:

**Thesis Track**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Six formal lecture courses</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Literature seminar</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>One approved graduate course and/or research course</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CHEM 9996 Master's Thesis Research</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credit Hours: 30

**Coursework Track**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ten formal lecture courses</td>
<td>30</td>
</tr>
</tbody>
</table>

Total Credit Hours: 30


Culminating Events:

**Thesis:**
The M.S. thesis is the culminating event for the Thesis Track. The thesis should be an original piece of research. Often, but not always, the research described in the M.S. thesis can be published in a peer-reviewed journal. The student coordinates the time for the defense with her/his Graduate Advisory Committee, which is responsible for evaluating the thesis and its defense. No thesis should go to defense unless it is ready for public scrutiny.

Master's Examination:
The master's examination is usually the last requirement to be fulfilled by students in the Coursework Track. Its purpose is to demonstrate a breadth and depth of knowledge in the core concepts of Chemistry. The exam is based on the student's major track in Chemistry. Faculty members in the student's track write the questions for the master's exam. The faculty members who write the questions grade the exam. Students schedule the exam with the department.

Contacts
Program Web Address:
https://www.temple.edu/academics/degree-programs/chemistry-ms-st-chem-ms

Department Information:
Dept. of Chemistry
130 Beury Hall
1901 N. 13th Street
Philadelphia, PA 19122-6014
chemgrad@temple.edu
215-204-7118

Submission Address for Application Materials:
https://cst.temple.edu/academics/graduate-programs/apply-now

Department Contacts:
Admissions:
Graduate Secretary
chemgrad@temple.edu
215-204-1980

Program Coordinator:
Dr. Michael Zdilla
Graduate Chairperson
mzdilla@temple.edu
215-204-7886

Chairperson:
Dr. Ann M. Valentine
ann.valentine@temple.edu
215-204-7836