

Overview

The Department of Chemistry seeks to provide interested undergraduates the opportunity to obtain both a bachelor's and master's degree in chemistry in an accelerated, five-year track through the accelerated master's program. The program retains the core academic rigors of our traditional master's program, including a breadth of chemical knowledge and research experience. The accelerated master's program provides students a competitive position for graduate programs and careers in chemical industry based on the increased content knowledge and practical experience.

Admission to the Program

Students who are interested in the program should consult with the chair of the Graduate Admissions Committee to review to process for admission and ensure that the accelerated master's program is the optimal choice to help meet the student's career goals.

Admission requirements

Student may apply to the accelerated master's program beginning in the spring of their junior year through the fall of their senior year, with preference to students applying in their junior year.

Admission to the program depends on the following criteria:

1. A minimum cumulative grade point average of 3.0.
2. Completion of the appropriate Graduate College application form
3. Satisfactory completion of at least two of the following courses (CHEM165, CHEM 260, CHEM 231, or CHEM 221) and one laboratory (CHEM 114, CHEM 166, CHEM 219 or CHEM 291).
4. Agreement from one chemistry faculty member to serve as the student's research advisor for CHEM 391 or 395. This faculty member should complete one of the required letters of recommendation from item #2 above.

GRE scores are not required for admission to the accelerated master's program, and a student may not initiate master's coursework until the Graduate College has made an offer of admission. Students initiate approved master's degree coursework during their senior year.

Application process

Students complete the formal application at the Graduate College, whereupon the department Graduate Affairs Committee reviews the complete application and makes a recommendation to the Graduate College based on the criteria above and likelihood of competition of a master's degree. A final decision is made solely by the Graduate College and communicated to the student.

Program Requirements

Students must earn a minimum of 30 credits of graduate course work with a minimum GPA of 3.0, complete the comprehensive exam requirement, and compete respective research requirements (CHEM 391 or CHEM 395) for the two available tracks of the accelerated master's degree in chemistry. Students must also meet the requirements of the Graduate College for completion of a master's degree.

Coursework

Bachelor of Science students in chemistry who are accepted into the accelerated master's program must complete no fewer than six credit hours of graduate-level coursework, and up to six credit hours of graded credits may be applied to both the bachelor's and master's degrees. Students can apply up to three additional credit hours of graduate level course work completed in the senior year to the master's degree, but these additional credits cannot count toward the bachelor's degree. Students in the accelerated master's program will complete the same core coursework as traditional master's degree students, namely a minimum of two core courses within their area of chemistry specialization (division). In addition, AMP students must meet a distribution requirement by taking a minimum of one course of advanced level work in one area outside of their division. Students may complete any chemistry course at the 300-level or those at the 200-level approved for graduate credit, selected "related science" courses, or other graduate-level courses by approval of the Graduate Standards Committee. Students in the accelerated master's program are required to earn a minimum of 15 graded credits per Graduate College policy.

Master core course requirements* by division	
Analytical	CHEM 221 and one of the following: CHEM 223, 225 or 226
Inorganic	CHEM 231, and either CHEM 234 or 236
Organic	CHEM 241, and either CHEM 242 or 251
Physical	CHEM 262 and 264

*If CHEM 221 and CHEM 231 are taken in the junior year (i.e., prior to application to the AMP) or are not used for both BS and MS degrees, the requirement is still satisfied, but those credits would not count toward the MS degree.

Approved divisional distribution courses	
Analytical	CHEM 221, 223, 225, 226, 227, 228
Inorganic	CHEM 231, 234, 236, 237, 238
Organic	CHEM 241, 242, 251, 257, 258
Physical	CHEM 260, 262, 264, 267, 268
Related science	BIOC 301, 302, CHEM 205, 206, 214

Comprehensive Examination

The comprehensive examination for accelerated master's program students consists of the following three parts:

- (1) Completion of qualifying examinations (the American Chemical Society standard examinations in analytical, inorganic, organic, and physical chemistry) and coursework.
- (2) Successful completion of CHEM 381.
- (3) Completion of a total of two credits of CHEM 318.
- (4) Completion of CHEM 384 in the spring semester of the student's fifth year.

Thesis

All accelerated master's program students must complete no fewer than nine credits of research as either CHEM 391 Master's Thesis Research or CHEM 395 Independent Literature Research

Project, depending on MS track. Research under CHEM 391 or 395 will culminate in scholarly products according to guidelines prescribed by the Graduate College. To maintain the accelerated track, it is anticipated that the thesis will be completed and defended during the spring semester of the student's fifth year. AMP students will initiate their thesis research in the summer following receipt of the bachelor's degree.

Advancement to candidacy

Accelerated master's program students are advanced to candidacy for the master's degree upon completion of the bachelor's degree.