

Guidelines for Accelerated BS/MS Degree in Chemistry

(Senate Policy 413.1)

Goals of the Proposed Program:

- Develop an integrated bachelor's/master's degree program that meets the needs of the students and faculty in the Department of Chemistry.
- Allow outstanding undergraduate students to pursue an accelerated research-based master's degree which meets all Graduate School requirements for thesis option master of science degrees.

Guidelines:

Overview:

- Students will apply up to a maximum of six of the course credits earned while an undergraduate to both their bachelor's and master's degree.
- Three credits of undergraduate research earned during the senior year will be substituted for graduate-level research credits.
- Students will complete a minimum of 152 total credits for the bachelor's and master's combined.
- Students will earn one of the 3 bachelor's degrees currently offered in the chemistry department at Michigan Tech, or the interdisciplinary BS in Biochemistry and Molecular Biology (chemistry concentration).
- Students will then earn the MS degree in Chemistry (thesis option) currently offered in the department.
- Students can apply for admission to the accelerated master's program at any time after they attain sophomore-level class standing and up until they are awarded their bachelor's degree. Current graduate students may not retroactively enroll in this program.
- In order to be formally accepted into the accelerated master's program students must apply to and be accepted into the Graduate School at Michigan Tech. Applications will be reviewed by the chemistry Graduate Admissions Committee according to the normal procedure. The GRE, three academic letters of recommendation, and a résumé or cv are required as part of the application.
- If a student wishes to apply, they will meet with the Graduate Programs Assistant, who will provide a preliminary review of credits to date. They will then meet with the Graduate Programs Committee chair to discuss their degree options.
- Only students with a cumulative GPA of 3.0 or above are eligible to enter the accelerated master's program. Students who are accepted to the program will not be allowed to continue if their cumulative undergraduate GPA falls below 3.0. Students may re-apply when their GPA is again at least 3.0.
- Students will be considered undergraduates for the purposes of financial aid, tuition, and class standing until their undergraduate degree has been awarded.
- Once students are awarded their undergraduate degree, they will be considered graduate students for the purposes of financial aid and tuition.

- Prior to completion of the master's degree, students must indicate on their master's degree schedule which credits earned while an undergraduate (up to a maximum of six) should be applied to both their bachelor's and master's degrees.

Sample Timeline (see attached chart):

- Beginning in spring of the junior year, students will begin undergraduate research, either in a class such as CH4721 (SMBC, SCHP), or by enrolling in CH4990/CH4995.
- During the summer between the junior and senior year students will enroll in at least 3 credits of undergraduate research under senior rule (these credits will count only toward the master's degree, not the bachelor's degree). (3 credits toward 30 required for MS)
- During the senior year fall and spring semesters, six of the course credits taken will count toward both the bachelor's degree and the master's degree. Students will choose these credits carefully in consultation with their advisor, especially looking for graduate-level courses (≥ 5000). A minimum of 12 graduate-level course credits (not including research credits) are required for the master's degree and it can be difficult to find that many all in one year. (6 credits toward 30 required for MS—9 to date)
- The courses selected for double-counting will be reviewed by the Graduate Programs Committee to ensure that they will be useful for the student's research goals as well as ensuring mastery of chemistry at an advanced level in both breadth and depth.
- During the summer following the senior year (and receiving the bachelor's degree), students will enroll in 3 master's research credits. At this time, student status will change to graduate student. (3 credits toward 30 required for MS—12 to date)
- During the fall and spring semesters of the fifth year, students will enroll in a rigorous combination of courses and research credits in consultation with the advisor and the Graduate Programs to ensure mastery of chemistry at a level appropriate for an advanced degree, satisfaction of all Graduate School requirements including course work, and completion of the degree by the end of summer following the fifth year.
- During the summer following the spring of the fifth year, students will write and defend their thesis.
- The maximum time to degree for students in the accelerated master's program is 5 years from the time the student is accepted into the program.

Credit Summary

- BS degree 128 credits (includes 6 double counted credits)
- Senior rule (MS) 3 credits
- MS degree 21 credits (plus 6 double counted credits; see above)
- Total credits 152 credits