

MS in Chemistry

Master's Degree Requirements

Master of Science in Chemistry

Candidates Within two years of initial enrollment, candidates for the M.S. degree in chemistry must demonstrate proficiency ~~in organic, inorganic, physical, and analytical chemistry within two years of initial enrollment at the undergraduate level~~ in four of the following five areas: biochemistry, organic, inorganic, physical, and analytical chemistry.

A minimum of 30 hours is required, normally including 3 hours in [CHEM 6897](#) Chemistry Colloquium. No more than 3 hours in [CHEM 6897](#) may be applied toward the ~~required minimum of~~ 30 credit hours.

Distribution Requirement

Students may choose to focus their coursework efforts in one of four broadly defined subdiscipline areas (biochemistry, inorganic, organic, or physical chemistry). At least 6 hours of chemistry coursework in one (or more) sub-disciplines(s) outside of their major emphasis area must be completed. The following courses do not fulfill the distribution requirement:

CHEM 4212	Instrumental Analysis	2
CHEM 4233	Laboratory In Instrumental Analysis	2
CHEM 4302	Survey Of Physical Chemistry With Applications To The Life Scienc	3
CHEM 4343	Physical Chemistry Laboratory II	2
CHEM 4412	Advanced Inorganic Chemistry	3
CHEM 4433	Inorganic Chemistry Laboratory	2
CHEM 4712	Biochemistry	3
CHEM 4733	Biochemistry Laboratory	2

Master of Science in Chemistry with Thesis

Students selecting this option must be enrolled full-time for at least two consecutive semesters. During this time, students are expected to enroll in [CHEM 6905](#), Graduate Research in Chemistry, and conduct their thesis research. A maximum of 12 hours of ~~CHEM 6905~~ may be applied toward the required 30 hours. At least 9 hours must be at the 5000 level, excluding [CHEM 6905](#). A maximum of 9 hours in 3000 level or above courses outside the department may be accepted if students receive prior approval of their advisers and the Director of Graduate Studies. Students are expected to follow all other general requirements of the Graduate School regarding master's degree and thesis requirements.

Master of Science without Thesis

Unlike the thesis option, students need not be enrolled full-time. Of the required 30 hours, 15 credits must be at the 5000 level. A maximum of 6 credits of [CHEM 6905](#), Graduate Research in Chemistry, may be included in place of 4000 level courses. ~~A~~ ; a maximum of 12 hours taken in 3000 level or above courses outside the department may be accepted with prior approval of the Director of Graduate Studies.

Master of Science Degrees for Doctoral Students

Doctoral students may receive a Master's degree in their program for work completed towards the doctoral degree. To receive a Master's degree, doctoral students must complete 30 credit hours of courses, with at least 15 of these credit hours in courses numbered at or above the 5000 level. No more than 3 hours in CHEM 6897, 3 hours from a combination of CHEM 6487, CHEM 6687, CHEM 6787, CHEM 6812, CHEM 6822 and CHEM 6832, and 6 hours of CHEM 6905 may be applied.

There are no distribution requirements for the Master's degree for Doctoral students.

The non-dissertation courses presented for the M.S. degree may not include any of the following courses:

<u>CHEM 4212</u>	Instrumental Analysis	2
<u>CHEM 4233</u>	Laboratory In Instrumental Analysis	2
<u>CHEM 4302</u>	Survey Of Physical Chemistry With Applications To The Life Scienc	3
<u>CHEM 4343</u>	Physical Chemistry Laboratory II	2
<u>CHEM 4412</u>	Advanced Inorganic Chemistry	3
<u>CHEM 4433</u>	Inorganic Chemistry Laboratory	2
<u>CHEM 4712</u>	Biochemistry	3
<u>CHEM 4733</u>	Biochemistry Laboratory	2
<u>CHEM 6196</u>	Advanced Reading In Chemistry	1

Sign-offs from other departments affected by this proposal

None

Rationale

A new degree, entitled "Master of Science Degrees for Doctoral Students", will allow graduate students an opportunity to earn a M.S. degree while endeavoring to complete the Ph.D. program. Without this change, graduate students working towards completion of the Ph.D. program would have difficulty accruing the requisite number of 5000 level course credits to earn a M.S. degree, along the path to completion of the Ph.D. program.