

M.S. in Chemistry

If interested in any degree offering in the Department of Chemistry and Biochemistry, please review the department webpage: <http://www.chemistry.montana.edu/graduate/>.

A Master of Science (M.S.) Degree in Chemistry requires a minimum of 30 credits and include only those courses listed on an approved Program of Study. A student's Program of Study requires approval from a student's research advisor, graduate committee and the Department Head. The M.S. degree can include creative scholarship and an accompanying thesis (Plan A) or be based solely on coursework (Plan B). A thesis M.S. requires that a student take at least 10 credits of CHMY 590 (Master's Thesis). A comprehensive exam is required. A coursework M.S. degree culminates with a professional paper or project and requires enrollment in CHMY 575 (Professional Paper). In Plan B, at least 15 course credits on the student's MS program of study will need to come from chemistry courses offered in the department. Graduate Classes outside of the department are permissible with approval from the student's advisor. Nine credits at the 400-level are allowed. Additional information about both types of M.S. programs – coursework and thesis – is published on the Graduate School's Degree Requirements site: https://www.montana.edu/gradschool/policy/degreq_masters.html.

Acceptable Courses on a Program of Study for an MS degree in Chemistry.

CHMY 501	Advanced Inorganic Chemistry	3
CHMY 513	Computational Chemistry	3
CHMY 515	Structure and Bonding in Inorganic Chemistry	3
CHMY 517	Synthetic Chemistry	3
CHMY 524	Mass Spectrometry	3
CHMY 526	Solution NMR Spectroscopy:practical applications to the structural determination of small molecules	3
CHMY 533	Physical Organic Chemistry	3
CHMY 535	Reagent Chemistry	3
CHMY 540	Organic Synthesis	3
CHMY 551	Organic Structure Elucidation	3
CHMY 554	Organometallic Chemistry	3
CHMY 557	Quantum Mechanics	3
CHMY 558	Classical & Stat Thermodynamic	3
CHMY 559	Kinetics & Dynamics	3
CHMY 560	Symmetry, Orbitals, and Spectroscopy	3
CHMY 564	Adv Quantum Chemistry	3
CHMY 575	Professional Paper	1-6
CHMY 590	Master's Thesis	1-10
CHMY 591	Special Topics	3
CHMY 592	Independent Study	1-3
CHMY 594	Seminar	1
MTSI 501	Material Structure and Bonding	3
MTSI 502	Adv Materials Science II	3
MTSI 503	Optical, Electronic, and Magnetic Properties of Materials	3
MTSI 511	Thermodynamics of Materials	3
MTSI 512	Kinetics Phase Transformations	3
MTSI 551	Adv Materials Characterization	3
MTSI 552	Adv Material Character II	3
PHSX 516	Experimental Physics	3

PHSX 531	Nonlinear Optics/Laser Spectroscopy	3
PHSX 506	Quantum Mechanics I	3
PHSX 544	Condensed Matter Physics I	3
STAT 511	Methods of Data Analysis I	3