

## CHEMISTRY AMP

All students must meet the Requirements for the Accelerated Master's Degree Programs (<http://catalogue.uvm.edu/graduate/degree/requirements/requirementsforacceleratedmastersdegreeprograms/>)

### OVERVIEW

Qualified undergraduate students who plan to earn a M.S. in Chemistry may enroll in the Accelerated Master's Entry Program (AMP), which enables students to begin working on the M.S. while still an undergraduate. Students apply to the program in the second semester of their junior year or the first semester of their senior year. Upon admission to the program by the Graduate College, students will choose 9 credits of graduate approved courses that can be taken while still an undergraduate.

### REQUIREMENTS FOR ADMISSION TO GRADUATE STUDIES FOR THE DEGREE OF MASTER OF SCIENCE FOR ACCELERATED STUDENTS

Students must apply for the Accelerated Master's Entry Program (AMP) during spring semester of their junior year. Students interested in the AMP can request information in writing from the Chemistry department. Recommendation for admission will be based upon the student's prior academic record with particular attention paid to performance in upper-division 200-level Chemistry courses. Following formal Graduate College admission to the Accelerated Master's Program, up to 9 credits of approved graduate course work may be taken that may be counted toward both the undergraduate and graduate degree requirements. Generally, AMP students begin research by or during the summer prior to their senior year.

### MINIMUM DEGREE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE

The above prerequisites for admission must be supplemented in either of the following two ways:

OPTION A (THESIS)	
Completion of twelve credits of CHEM 391 and submission of a satisfactory thesis; and completion of at least thirty credits of graduate work (courses and Master's Thesis Research).	
OPTION B (NON-THESIS)	
Completion of six credits of CHEM 395; and completion of at least thirty credits of graduate work (courses and Literature Research Project).	

M.S. students should decide at the beginning of their program whether they will pursue Option A or Option B and inform the Department of Chemistry and the Graduate College of their decisions.

### COMPREHENSIVE EXAMINATION

In the Chemistry Department, the Comprehensive Examination for the Master's degree consists of completion of the following three parts:

(1) Passing of the (entrance) qualifying-examinations requirement within the first year, and successful completion of the coursework requirement. The qualifying examinations establish a broad knowledge base in all major areas of chemistry, while the latter requirement is constructed to add breadth to the students' knowledge base in specific areas of chemistry not directly related to their research area.

(2) Successful completion of the Advancement to Candidacy exam (CHEM 380). This course consists of the preparation of a 5-page dossier of research accomplishments, and an oral examination on its contents, which serves as a comprehensive review of the student's fundamental understanding of chemistry.

(3) Completion of a total of 2 credits of Current Topics (CHEM 318). This course consists of a review of 1 major article from the current literature (and supporting supplementary articles).

The oral presentation is followed by an examination of the student's understanding of the crucial information in that paper by faculty in the student's major area.

### REQUIREMENTS FOR ADVANCEMENT TO CANDIDACY FOR THE DEGREE OF MASTER OF SCIENCE

Proficiency in 3 areas of chemistry evidenced by the qualifying examinations or completion of designated courses at this university		
1 semester of residence		
CHEM 318	Current Topics in Chemistry (Must be Taken Twice)	1
CHEM 379	Intro to Graduate Research	1
CHEM 380	Chemical Investigations	1
CHEM 381	Grad Seminar	1
At least 15 credits of formal graded course work including:		15
6 credits of graduate level courses in the chemical field of specialization		
9 credits of graduate-level chemistry courses not in the area of specialization		
Maintenance of an overall point-hour ratio of 3.00		