# CHEMISTRY (M.S.)

## **Admission Requirements**

In addition to the requirements of the Division of Graduate Studies, applicants must have the following:

- 1. A B.S. degree in chemistry or a closely related field with passing grade ("C" or better) in the following courses with labs
  - 2 semesters of General Chemistry
  - · 2 semesters of Organic Chemistry
  - 1 semester of Analytical Chemistry
  - 1 semester of Physical Chemistry
  - 1 semester of Inorganic Chemistry
- 2. Three Letters of Recommendation
- 3. A Statement of Purpose for Graduate Study
- 4. GRE Score

#### **Retention Requirements**

In addition to satisfying the basic requirements of the Division of Graduate Studies, students are required to maintain a chemistry GPA of 3.00 or higher every semester. Seminar courses, dissertation courses, and other non-chemistry elective courses are excluded from the calculation of the chemistry GPA. Students whose chemistry GPA is below 3.00 will be placed on probation for up to one year to fix the deficiencies.

## **Degree Requirements**

A student pursuing a M.S. degree in Chemistry is required to complete a minimum of 30 credit hours with a written thesis in Chemistry.

1. Within the 18 credit hours of lecture courses, students must complete at least three (3) of five (5) core courses for a total of nine (9) hour and two semesters of seminar for one (1) credit hour. The core courses are:

Code	Title	Hours
CHEM 523	ADVANCED ANALYTICAL CHEMISTRY	3
CHEM 541	ADVANCED INORGANIC CHEMISTRY	3
CHEM 531	BIOCHEMISTRY	3
CHEM 558	QUANTUM CHEMISTRY	3
CHEM 536	PHYSICAL ORGANIC CHEMISTRY	3

- 2. Students will fulfill the remaining 11 hours from Chemistry electives with no more than 11 hours in CHEM 580 THESIS RESEARCH. It is possible to take some courses in related fields upon recommendation of the advisor.
- 3. Write and defend a Thesis Research Proposal.
- 4. Pass the Graduate Area Comprehensive Examination in three chemistry areas.
- 5. The student must participate as a teaching assistant in the chemistry department for at least two semesters.
- 6. Defend a thesis before the Thesis Committee and public audience.
- 7. Submit an approved thesis to the Division of Graduate Studies with one copy to the Department and one to the University Library.

## Non-Thesis Master's Degree

Ph.D. students who fulfill the following requirements will be awarded a Non-Thesis Master's degree in Chemistry, if the student applies and do not wish to continue to finish the doctorate degree.

- 1. A minimum of 36 credit hours, including at least 18 hours of approved graduate level lecture courses and two hours of seminar with a GPA of 3.00 or better. The graduate lecture courses should include at least three of the five core courses:
  - Advanced Analytical Chemistry,
  - Advanced Inorganic Chemistry,
  - Biochemistry,
  - Quantum Chemistry, and
  - Physical Organic Chemistry.
- 2. Pass the Graduate Area Comprehensive Examination.
- 3. Pass an oral examination demonstrating competency in Chemistry subject matter.