M.S. in Chemistry

The Department of Chemistry and Biochemistry offers studies leading to the degree of Master of Science in Chemistry with experimental and/or theoretical research in the following fields of specialization: Analytical, Chemistry, Biochemistry, Bioorganic Chemistry, Environmental Chemistry, Inorganic Chemistry, Organic Chemistry, Organometallic Chemistry, Physical Chemistry, Chemical Physics, and Materials Science.

Admission Requirements

- 1. Bachelor's degree in Chemistry or in a related science discipline from an accredited institution in the U.S. or proof of equivalent education in a foreign institution
- 2. Official transcripts of all previous academic work.
- 3. Applicants whose degrees are from non-English speaking institutions are required to demonstrate English proficiency. Please consult the Graduate School (https://www.utep.edu/graduate/future-students/applicant-timelines.html) website for required scores.
- 4. Three letters of recommendation from individuals who are qualified to assess the applicant's potential for graduate work.
- 5. A personal statement setting out the applicant's reasons for wishing to pursue a MS in Chemistry at UTEP and future career plans.
- 6. Curriculum vitae.

Degree Requirements

In addition to the institutional requirements for a Master of Science degree, the candidate must also meet the following stipulations: a minimum of 15 of the required 30 hours of credits must be in chemistry lecture courses at the graduate level. Credits must include at least one graduate-level course in three of the five areas of Organic Chemistry, Physical Chemistry, Inorganic Chemistry, Analytical Chemistry, or Biochemistry. The candidate must also enroll in CHEM 5195 during each semester of residence. Not more than one hour of CHEM 5195 can be counted toward the 30-credit-hour requirement. The program for the MS degree in Chemistry can include nine (9) hours of supporting work from approved fields. A program of specialization in Chemical Physics can be elected with the permission of the graduate advisor. Such a program can include, within the required 30 hours of credits, up to 12 hours in the related fields (e.g., Physics, Mathematics).

Chemistry MS students give an oral research progress report to their thesis committee within their first year of study.

Courses of study are designed for each student in consultation with the advisor. Each student must confer with the graduate advisor prior to each registration. The thesis presented for this degree must describe original work related to a research problem of some importance. The thesis must be defended orally.

Degree Plan

Required Credits: 30

Code	Title	Hours	
MS in Chemistry (All courses require a grade of C or better)			
Required Courses:			
CHEM 5195	Graduate Seminar	1	
Areas of Chemistry:			
Select a course in three of the areas	below:	9	
Organic Chemistry:			
CHEM 5321	Advanced Organic Chemistry I		
CHEM 5322	Advanced Organic Chemistry II		
CHEM 5329	Contem Topics Organic Chemistr		
Physical Chemistry:			
CHEM 5351	Advanced Physical Chemistry I		
CHEM 5352	Advanced Physical Chemistry II		
CHEM 5359	Contemp Topics Physical Chem		
Inorganic Chemistry:			
CHEM 5361	Advanced Inorganic Chemistry		
CHEM 5369	Contemp Topics Inorganic Chem		
Analytical Chemistry:			
CHEM 5318	Advanced Analytical Chemistry		
CHEM 5319	Contem Topics Analytical Chem		
Electives:			

Select fourteen additional hours of electives, with at least eight being CHEM:

Total Hours		30
CHEM 5398 & CHEM 5399	Thesis and Thesis	6
Thesis:		
CHEM 5396	Graduate Research in Chemistry	
CHEM 5369	Contemp Topics Inorganic Chem	
CHEM 5361	Advanced Inorganic Chemistry	
CHEM 5359	Contemp Topics Physical Chem	
CHEM 5352	Advanced Physical Chemistry II	
CHEM 5351	Advanced Physical Chemistry I	
CHEM 5341	Anal./Model of Bio Structures	
CHEM 5339	Contemp Topics in Biochemistry	
CHEM 5329	Contem Topics Organic Chemistr	
CHEM 5322	Advanced Organic Chemistry II	
CHEM 5321	Advanced Organic Chemistry I	
CHEM 5319	Contem Topics Analytical Chem	
CHEM 5318	Advanced Analytical Chemistry	
CHEM 5301	Modern General Chemistry	
CHEM 5196	Graduate Research in Chemistry	
Select fourteen additional hours of electives, with at least eight being CHEM:		