CHEMISTRY M.S.

Admission Requirements

Complete the following admission requirements:

- Submit GRE General Test scores.
- If English is not your native language, submit scores from both the Test of Spoken English and the Test of Written English, as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

Program Requirements

< Back to Department (https://catalog.uaf.edu/academic-departments/chemistry-biochemistry/)

Minimum Requirements for Chemistry M.S.: 30 credits

OPTIONAL CONCENTRATIONS: BIOCHEMISTRY AND NEUROSCIENCE (P. 1), ENVIRONMENTAL CHEMISTRY (P. 1)

Code	Title	Credits
General University Requirements		
Complete the graduate general university requirements. (https://catalog.uaf.edu/masters/#gurmastersdegreestext)		
Master's Degree Requirements		
Complete the master's degree requirements. (https://catalog.uaf.edu/masters/#typesofmastersdegrees)		
Chemistry Program Requirements		
Complete any deficiencies concurrently with this degree.		
Complete two credits of advisory committee-approved seminar courses from the two seminar course choices below. [1]		2
CHEM F688	Biochemical and Molecular Biology Seminar	
CHEM F691	Research Presentation Techniques	
Complete 7-10 credits of courses approved by the advisory committee.		7-10
Concentration		
Complete 6-9 credits from relevant advisory committee-approved graduate-level courses or select one of the following concentrations		6-9
Biochemistry and Neuroscience		
Environmental Chemistry		
Thesis or Project Requirements		
Complete the thesis or project option as described below. [2]		12
Total Credits		**30**

[1] Students in the Biochemistry and Neuroscience concentration should take the Biochemical and Molecular Biology Seminar and students in the Environmental Chemistry concentration should take Research Presentation Techniques.

[2] The minimum number of credits required is 30. The required M.S. coursework above represents 18 credits. The minimum number of thesis credits required is 6. For the thesis option the remaining 6 credits can either be thesis credits or courses at the F400 level or higher. For the project option, the remaining 6 credits can be courses at the F400 level or higher.

Thesis or Project Options

THESIS OPTION

Code	Title	Credits
Complete the following:		
CHEM F699	Thesis	6
Thesis credits or committee-approved courses that are F400 level or higher.		6
Submit a committee-approved, written research-based thesis proposal and pass an oral comprehensive examination centered on the proposal.		
Complete a committee-approved, research-based written thesis and pass an oral defense of the thesis.		
Total Credits		**12**

PROJECT OPTION

Code	Title	Credits
Complete the following:		
CHEM F698	Non-thesis Research/Project	6
Committee-approved courses that are F400 level or higher.		6
Submit a committee-approved, literature-based written project proposal and pass an oral comprehensive examination centered on the proposal.		
Complete a committee-approved, literature-based written project and pass an oral defense of the project.		
Total Credits		**12**

Optional Concentrations

BIOCHEMISTRY AND NEUROSCIENCE

Code	Title	Credits
Biochemistry and Neuroscience Concentration Requirements		
Complete 9 credits from the following list of core courses		9
CHEM F654	Protein Structure and Function	
CHEM F657	Molecular Foundations of Gene Expression	
CHEM F670	Cellular and Molecular Neuroscience	
CHEM F674	Membrane Biochemistry and Biophysics	
CHEM F675	Cellular Signaling	
Total Credits		**9**

ENVIRONMENTAL CHEMISTRY

Code	Title	Credits
Environmental Chemistry Concentration Requirements		
Complete 6 credits from the following list of core courses:		6
CHEM F606	Atmospheric Chemistry	
CHEM F609	Aqueous and Environmental Geochemistry	
CHEM F631	Environmental Fate and Transport	

CHEM F655	Environmental Toxicology	
Total Credits		**6**