

# CHEMISTRY | MASTER OF SCIENCE IN EDUCATION (CHEMISTRY EMPHASIS)

The Master of Science in Education (MSE) with an Emphasis in Chemistry is a degree offered by the Chemistry Department and the Department of Advanced Education. This degree is designed for a professional with a bachelor's degree in secondary science education or chemistry who seeks to obtain the advanced training in chemistry and education to teach at the college level. The curriculum consists of a 15 credit hour advanced education programs core, a 9 credit hour chemical education core, and 12 credit hours of advanced chemistry content electives. It is designed to satisfy the requirements set forth by the Higher Learning Commission (HLC) for instructors to teach college-level coursework.

## Program Requirements

Code	Title	Hours
<b>Advanced Education Programs Core (online)</b>		
AEP 800	Innovative Technology Integration	3
AEP 803	Educational Research	3
AEP 858	Data Analysis and Assessment	3
AEP 867	Instructional Design and Assessment	3
AEP 880	Cultural Diversity	3
<b>Chemical Education Core</b>		
CHEM 801	Intro. to Graduate Studies in Chemistry & Chem. Educ.	2
CHEM 820	Chemistry Education Research and Practice	3
Select four credit hours from Graduate Chemistry Laboratory Courses		4
<b>Advanced Chemistry Electives (online)</b>		
Select four of the following:		12
CHEM 632G	Physical Chemistry: Chemical Thermodynamics	
CHEM 634G	Physical Chem: Quantum Mechanics & Chem Kinetics	
CHEM 644G	Organic Spectroscopic Analysis	
CHEM 646G	Theories of Organic Chemistry	
CHEM 656G	Instrumental Analysis	
CHEM 662G	Biochemistry I	
CHEM 664G	Biochemistry II	
CHEM 666G	Inorganic Chemistry	
Masters Degree Comprehensive Examination/Assessment		
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Note: The advanced laboratory courses will be taught in the summer using a hybrid delivery mode. Each 8 week summer course will contain a 2-week on-campus, face-to-face, hands-on session along with 6 weeks of online learning activities.

## Graduate School Graduation Requirements

### All Graduate degrees <sup>1</sup> require:

- Maintain a C or higher in all coursework.
- Maintain a cumulative GPA of 3.0 or higher. (Refer to program)
- A minimum of 30-75 hours of Graduate course work. (Refer to program)
- Comprehensive Examination or equivalent assessment is required. (Master of Liberal Studies requires a Comprehensive Examination **and** Concentration Exam)
- Degree completion within 8 years.

<sup>1</sup> Refer to degree program for any additional requirements.