GRADUATE CHEMISTRY CERTIFICATE

The Graduate Chemistry Certificate program will assist educators in teaching at a higher academic level and will increase their opportunity for salary advancement. The certificate allows industry professionals to advance in their careers.

Contact Information

chemistry@css.edu

Learning Outcomes

Upon completing the Graduate Certificate in Chemistry, students will be able to:

1. Demonstrate an expanded knowledge of chemistry. Students will be able to articulate an understanding of complex concepts in several chemistry sub-disciplines, such as biochemistry, chemical education, analytical, inorganic, organic, and physical chemistry.
2. Critically read and evaluate scientific literature to develop critical assessment of scientific ideas.
3. Effectively communicate complex scientific concepts, consequences, and the rationale underpinning conclusions, to specialist and non-specialist audiences clearly and unambiguously.
4. Examine scientific ethical issues to properly identify ethical responsibility in science-related professions.
5. Integrate advanced knowledge and critical thinking skills to evaluate scientific problems to gain new scientific insight.

Requirements

Students must achieve the following program requirements for all courses listed under Program Requirements and Program Required Courses for the Chemistry Graduate Certificate.

Program Requirements

Major Credits: 18
Minimum GPA: 3.0
Minimum Grade: C

Program Required Courses

Code	Title	Credits
Core Courses		**12**
CHM 6001	Bonding and Materials	
CHM 6002	Topics in Thermodynamics [1]	
or CHM 6005	Topics in Kinetics	
CHM 6003	Advanced Spectroscopy	
CHM 6004	Chemical Information and Communication	
Elective Courses		**6**
CHM 6101	Medical Biochemistry	
CHM 6102	Bioanalytical Chemistry	
CHM 6103	Chemical Education	
CHM 6104	Energy and Environment	
CHM 6105	Introduction to Computational Chemistry	
CHM 6107	Advanced Instrumental	
CHM 6110	Pharmaceutical Chemistry	
CHM 6111	Chemistry of the Elements	
CHM 6112	Advanced Organic Chemistry	
CHM 6113	Organometallic Reactions and Structures	
CHM 6777	Topics in Chemistry	
Total Credits		**18**

[1] If both CHM 6002 Topics in Thermodynamics and CHM 6005 Topics in Kinetics are taken, one will be counted as an elective.

Degree Requirements

To graduate from The College of St. Scholastica, graduate students must meet the following minimum degree requirements.

Minimum GPA: 3.0