## **ASSOCIATE IN SCIENCE IN CHEMISTRY FOR UC TRANSFER**

Chemistry is the study of matter, its composition, structure, properties, and changes. Central to natural and physical science majors, chemistry serves as a foundation subject for many disciplines while providing a pathway into chemical sciences and chemical industry. As a technical field of study that requires strong laboratory skills and experience, job opportunities span a broad range of sectors from education to research to industry to medicine. Upon successful completion of this degree, a student will qualify to be accepted to a University of California Chemistry program. Admission to the UC System will be guaranteed pending GPA requirements and application submission. Students completing this degree are exempt from Mendocino College Institutional Requirements. Students pursuing this degree must follow the UCTP-TMC for STEM GE pattern. Please check with a counselor for more specific transfer information.

## **Required Courses**

Course Number	Course Name	Units
CHM 250	General Chemistry I	5
CHM 251	General Chemistry II	5
CHM 255	Organic Chemistry I	5
CHM 256	Organic Chemistry II	5
MTH 210	Calculus and Analytic Geometry I	5
MTH 211	Calculus and Analytic Geometry II	5
MTH 212	Calculus and Analytic Geometry III	5
MTH 215	Differential Equations	3
PHY 220	Physics for Scientists and Engineers I	4
PHY 221	Physics for Scientists and Engineers II	4
PHY 222	Physics for Scientist and Engineers III	4

Total Major Units 50
Total Degree Units 66 – 70

## **Program Level Student Learning Outcomes:**

- 1. Demonstrate mastery of a broad set of chemical knowledge concerning the fundamentals in the basic areas of the discipline (general, analytical, organic).
- 2. Know and follow the proper procedures and regulations for safe handling and use of chemicals.
- 3. Use standard laboratory equipment, modern instrumentation, and classical techniques to carry out experiments.
- 4. Demonstrate critical thinking when interpreting experimental results and evaluating the validity of a proposed solution.

## **Career Opportunities in CHEMISTRY**

Completing the Associate in Science in Chemistry for UC Transfer can lead to a variety of opportunities. According to the American Chemical Society there is a wide range of career opportunities for chemical professionals that are categorized under five main sectors: Academia, Government, Entrepreneur, Industry, and Non-Profit and these sectors include areas of opportunities such as Research and Development, Quality Control/Regulatory, Manufacturing, Sales and Marketing, Law and Policy, Higher Education, and Public Health. Some examples of job opportunities may include but are not limited to the following: Chemical Information Management Specialist, Lab Researcher, High School Chemistry Teacher, Chemistry Professor; Environmental Protection, Chemical Health and Safety, Hazardous Waste Management, Forensic Chemist; Cheminformatics, Chemical Engineering, Formulation Chemist, and Technical Sales and Marketing.