CHEMISTRY (AS-T)

ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)

Upon completion of the Associate in Science in Chemistry for Transfer degree, students will have gained an understanding of the fundamental principles of chemistry and of the scientific process and will be able to demonstrate the analytical, critical thinking, and communication skills needed for continuing academic achievement and professional success. This Associate in Science Degree for Transfer in Chemistry is for seamless transfer to a CSU.

Program Student Learning Outcomes

- Students predict the qualitative and quantitative outcome of chemical reactions
- Students make analytical measurements
- Students predict properties of molecules based on their structure
- Students write conclusions based on laboratory observations and data
- Students demonstrate effective scientific documentation, safety, communication and appropriate collaboration.

Program Requirements

Code Number	Course Title	Units
Required Core		
CHEM 111	General Chemistry	5.0
CHEM 112	General Chemistry	5.0
CHEM 211	Organic Chemistry	5.0
CHEM 212	Organic Chemistry	5.0
MATH 170	Analytic Geometry and Calculus I	4.0
MATH 190	Analytic Geometry and Calculus II	4.0
PHYS 201	Engineering Physics	4.0
PHYS 202	Engineering Physics	4.0
Total Units		**36**

ASSOCIATE IN ARTS FOR TRANSFER DEGREE REQUIREMENTS

1. Completion of 60 semester units or 90 quarter units of degree-applicable courses,
2. Minimum overall grade point average of 2.0,
3. Minimum grade of “C” (or “P”) for each course in the major, and
4. Completion of IGETC and/or CSU GE-Breadth.

Career Opportunities

After transfer to a four-year college or university and completion of the bachelor’s degree program, graduates qualify for graduate study and for professional careers in government, education, and private industry, including agrochemistry, analytical chemistry, astrochemistry, atmospheric chemistry, biochemistry, biomedical technology, biotechnology, catalysis, ceramics industry, chemical engineering, chemical information, chemical sales, chemical technology, chemistry, colloid science, consulting, consumer product research and development, environmental chemistry, environmental consulting, environmental law, environmental management, environmental policy, environmental regulation, ethnobotany, food chemistry, forensic science, geochemistry, government policy, hazardous waste management, healthcare, health policy, inorganic chemistry, materials science, medicine, metallurgy, military systems, oceanography, organic chemistry, paper industry, patent law, perfume chemistry, petroleum and natural gas industry, pharmaceuticals, physical chemistry, plastics industry, polymer industry, R & D management, science writing, software design, space exploration, surface chemistry, teaching, technical writing, textile industry, and water chemistry.