

## **CERRITOS COLLEGE**

### **CHEMISTRY (AS-T)**

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

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 in Chemistry is for seamless transfer to a CSU.

CHEM	111	General Chemistry	5
CHEM	112	General Chemistry	5
CHEM	211	Organic Chemistry	5
CHEM	212	Organic Chemistry	5
MATH	170	Analytic Geometry and Calculus I	4
MATH	190	Analytic Geometry and Calculus II	4
PHYS	201	General Physics	4
PHYS	202	General Physics	4
<b>TOTAL UNITS FOR THE MAJOR:</b>			<b>36</b>

#### **ASSOCIATE DEGREE FOR TRANSFER COMPLETION REQUIREMENTS:**

The Associate in Science in Chemistry for Transfer degree will be awarded upon completion of coursework totaling 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) for STEM requirements with a minimum grade point average of 2.0. This transferable general education option permits students to delay two specified general education courses until after transfer, if desired. Please consult a counselor for details or page 81 in the Cerritos College catalog. All courses in the major must be completed with a grade of "C" or better.

#### **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.

## **FOR IGETC FOR STEM CERTIFICATION:**

### **Complete the following courses before transfer:**

- All courses in Area 1 (except 1C for UC-bound students), 2, and 5 of the traditional IGETC; and
- One course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines.

### **Complete the following courses after transfer:**

- One remaining lower-division general education course in Area 3, \*
- One remaining lower-division general education course in Area 4, \* and
- One course in Area 6 for UC-bound students who have not satisfied it through proficiency. \*

\*These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer.

## **FOR GE BREADTH FOR STEM CERTIFICATION:**

### **Complete the following courses before transfer:**

- All courses in Areas A, B, and E of the traditional GE Breadth curriculum; and
- One course in Area C1 Arts and one course in Area C2 Humanities; and
- Two courses in Area D from two different disciplines

### **Complete the following courses after transfer:**

- One remaining lower-division general education course in Area C\*, and
- One remaining lower-division general education course in Area D.\*

\*These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer.