Coalinga College \_\_\_\_\_

## Chemistry

## **UCTP Chemistry AS-T (AS-UCTP) Degree**

The Associate in Science in Chemistry for UC Transfer (AS-UCT) Degree provides a lower-division science foundation for those interested in pursuing a chemistry major or related fields of study and is intended for students transferring into a baccalaureate degree program in Chemistry or a related field at the University of California system. The AS-UCT in Chemistry provides essential academic preparation for entry into careers in research, teaching, scientific consulting, medicine, chemical engineering, pharmacy, material science, forensic science, government agencies, and chemical and biotechnology industries. Students who complete the AS-UCT in Chemistry are guaranteed admission to the UC system but not to a particular campus or major.

## Program student learning outcomes:

- 1. Students will recognize and apply the principles of atomic theory and molecular structure to predict chemical properties and chemical reactivity.
- 2. Students will apply analytical methodologies with quantitative and qualitative reasoning when approaching a problem in Chemistry.
- 3. Students will demonstrate competence in laboratory techniques, chemical experimental methods, and laboratory safety.
- 4. Students will collect, record, organize, and analyze experimental data and recognize the limitations of measurements.
- 5. Students will clearly communicate the results of scientific work in oral, written, and/or electronic formats to both scientists and the public at large.

## Students must meet the following requirements to qualify for an Associates for Transfer Degree (ADT):

- Complete at least 70 semester units that are eligible for transfer to the University of California (UC).
- Obtain a minimum grade point average of 2.0 in transferrable courses (note that a higher GPA may be required at some institutions).
- Minimum grade of "C" or better for each course in the major, and
- Certified completion of the IGETC for STEM requirements.

A minimum 3.5 GPA in the major will guarantee admission into the University of California System in a Chemistry Program. Students should consult with a counselor or academic advisor to develop an educational plan and verify university admission and transfer requirements.

Course #	Title	Units
Required Core Courses (50 Units)		
CHEM 001A	General Chemistry I	5
CHEM 001B	General Chemistry II	5
CHEM 012A	Organic Chemistry for Science Majors I	3
CHEM 012B	Organic Chemistry for Science Majors II	3
CHEM	Organic Chemistry Lab for Science Majors I	2
012AL	·	
CHEM	Organic Chemistry Lab for Science Majors II	2
012BL	·	
MATH 001A	Introduction to Calculus	5
MATH 001B	Calculus With Applications	5
MATH 002A	Multivariate Calculus	4
MATH 002B	Differential Equations	4
PHYSICS	Classical Mechanics	4
004A		
PHYSICS	Electricity, Magnetism, and Waves	4
004B	· · · · · · · · · · · · · · · · · · ·	
PHYSICS	Thermodynamics, Optics, and Modern Physics	4
004C		
	Total Major Units	50
	GE IGETC units	20
	Transferable IGETC Elective Units.	0
	Total Degree Units	70