

CHEMISTRY, ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER

Banner Code: 2_AST_CHEM
Financial Aid Eligible

The Associate in Science in Chemistry for Transfer degree (AS-T in Chemistry) is intended for students who plan to complete a bachelor's degree in Chemistry at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Consult with a counselor for more information on university admission and transfer requirements. On completion of the program, the student will have gained proficiency in general and organic chemistries.

Program Level Learning Outcomes

Upon completion of this program, students will be able to:

1. Recall the key concepts of inorganic and organic chemistry.
2. Explain how chemistry is applied in other fields.
3. Interpret experimental information, develop relationships, and correlate that experimental information with chemical theories.
4. Write quality laboratory reports, with well-developed discussions and conclusions.
5. Develop hands-on laboratory skills, operate independently during many procedures, and learn to design experiments.

Associate Degree for Transfer Graduation Requirements

Associate Degrees for Transfer require students to meet the following requirements:

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

Students should consult a GWC counselor in order to select the best pathway to meet their educational goals. For students who intend to transfer, the choice of general education will be specific to both their major and transfer institution.

Course	Title	Units
Required Courses		
CHEM G180	General Chemistry A	5
CHEM G185	General Chemistry B	5
CHEM G220	Organic Chemistry A	5
CHEM G225	Organic Chemistry B	5
MATH G180	Calculus 1	4
MATH G185	Calculus 2	4
PHYS G185	Calculus Based Physics: Mechanics	4

Course	Title	Units
PHYS G280	Calculus Based Physics: Electricity/Magnetism	4
Major Units		36
GE Pattern (CSU GE-Breadth or IGETC)		31-33
Total Units		60

***This Transfer Model Curriculum presumes completion of IGETC or CSU GE Breadth for STEM, allowing for completion of 6 units of non-STEM GE work after transfer.**

Recommended Program Sequence

These sequences are general course maps for students to finish all major and general education requirements for two-year completion of degrees, completion of short-term certificates, and/or fulfillment of transfer requirements. However, this may not be an appropriate path for all students. The two-year sequence is based on English and Math placement and meeting other course prerequisites. **Students are advised to meet with a GWC Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.**

Year 1:

Course	Title	Units
Semester 1		
ENGL G100	Freshman Composition ^	4
COUN G155	Planning for STEM (Biological and Physical Sciences)	3
CHEM G180	General Chemistry A	5
Units		12

Course	Title	Units
Semester 2		
Area A3: Critical Thinking course		3-4
CHEM G185	General Chemistry B	5
Area A1: Oral Communication course		3
Units		11-12

Year 2:

Course	Title	Units
Semester 3		
CHEM G220	Organic Chemistry A	5
MATH G180	Calculus 1	4
HIST G170	History Of The United States To 1876	3
or HIST G175	History of the United States Since 1876	
Units		12

Course	Title	Units
Semester 4		
CHEM G225	Organic Chemistry B	5
MATH G185	Calculus 2	4
PSCI G181	American Government: The Politics of Race and Ethnicity	3
Units		12

Year 3:

Course	Title	Units
Semester 5		
PHYS G185	Calculus Based Physics: Mechanics	4
Area C: Arts & Humanities course		3
Area B2: Life Science course		3
Area D: Social & Behavioral Science course		3
<i>Units</i>		<i>13</i>

Course	Title	Units
Semester 6		
PHYS G280	Calculus Based Physics: Electricity/ Magnetism	4
Area C1: Arts course		3
Area D: Social & Behavioral Science course		3
<i>Units</i>		<i>10</i>

[^] Program sequence may not be recommended for students who self-place into ENGL G100S. Students should see a Counselor for appropriate advisement.