

CHEMISTRY ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE

The Associate in Science for Transfer (AS-T) in Chemistry is intended for students who plan to transfer and complete a Bachelor's degree in Chemistry, or a similar major at a CSU campus. It serves the diverse needs of students who wish to obtain a broad and in-depth understanding of the field. The Chemistry Department offers comprehensive and integrative studies in each of the introductory courses in Chemistry. This AS-T in Chemistry is designed to prepare students who wish to pursue a Bachelor's Degree from a four-year institution. At the four-year institution, students may choose to specialize in one particular aspect of chemistry, such as Environmental Chemistry, Organic Chemistry, Atmospheric Chemistry, or Physical Chemistry. The objective of this degree is to delineate a successful career path for community college students entering the Chemistry program and to provide opportunities to explore the Chemistry major.

The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major.

To earn a Chemistry AS-T degree, students must meet the following requirements:

- Completion of the following major requirements with grades of "C" (or "P") or better;
- Completion of 60 CSU transferable semester units with a grade point average of at least 2.0; and
- Certified completion of the Intersegmental General Education Transfer Curriculum (IGETC-CSU) for STEM which requires a minimum of 31-33 units.

It is highly recommended that students complete courses that satisfy the U.S. History, Constitution, and American Ideals requirement as part of CSU-GE or IGETC before transferring to a CSU.

Students planning to transfer to a four-year institution and major in Chemistry should consult with a STEM counselor or general counselor regarding the transfer process and lower division requirements. Completion of IGETC-CSU for STEM is required in addition to the major requirements.

Code	Title	Units
Required Courses:		
CHEM 150	General Chemistry I	5
CHEM 151	General Chemistry II	5
CHEM 212	Organic Chemistry I	5
CHEM 213	Organic Chemistry II	5
PHYSIC 202	Physics I	4
PHYSIC 203	Physics II	4
MATH 250	Single Variable Calculus I	4
MATH 251	Single Variable Calculus II	4

Code	Title	Units
Major Total		36
Total Units That May Be Double Counted		7
General Education (IGETC for STEM) Units ¹		31-33
Elective (CSU Transferable) Units		0
Total Units		60

¹ This AS-T presumes completion of IGETC for STEM or CSU-GE Breadth for STEM, allowing for completion of 6 units of non-STEM GE work after transfer.

See Section on Degree, Certificate, and Transfer Information for additional information on the Associate Degrees for Transfer.

To earn an SBVC Associate Degree for Transfer (AA-T or AS-T) students must complete one of the following general education patterns:

CSU GE requirements (<https://www.valleycollege.edu/student-services/counseling/csuge/>)

IGETC requirements (<https://www.valleycollege.edu/student-services/counseling/igetc/>)

Program Learning Outcomes

At the completion of this program, students will be able to:

- Demonstrate proficiency on chemistry topics from national American Chemical Society (ACS) exams. Achieve a score that is one-half of one standard deviation below the national average (or higher) on the General Chemistry or Organic Chemistry versions, administered in CHEM 151 and CHEM 213, respectively.
- Demonstrate skill in standard laboratory techniques commonly acquired in lower division coursework.