

ASSOCIATE DEGREE FOR TRANSFER IN CHEMISTRY (IGETC) AS769

The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) introduces the concepts and principles upon which chemical knowledge is based, including chemical structures and nomenclature, stoichiometry and solving of chemical equations, the thermodynamics of chemical reactions, and theories of chemical bonding. Students will develop skills for critical/analytical thinking, perceptive reading/observation and interpretation. The Associate in Science in Chemistry to Transfer degree provides students with a core curriculum that will prepare them with the knowledge and skills required to earn a baccalaureate degree in chemistry.

Program Learning Outcomes

Upon successful completion of this program, students should be able to:

- Master content in inorganic and organic chemistry by describing chemical and physical structures and nomenclature, stoichiometry and solving of chemical equations, and analyzing and describing the nature of chemical reactions and energy.
- Measure and characterize properties of matter using a variety of research-level chemical instrumentation, laboratory techniques, statistical and computational methods.
- Display effective cooperation with others on projects and clearly communicate experimental results through oral and written means.
- Demonstrate professional integrity, safety, and environmental stewardship.

Required Courses (36 units)	Units
CHE-1A*/1AH* General Chemistry I/Honor	5
CHE-1B*/1BH* General Chemistry II/Honors	5
CHE-12A* Organic Chemistry I	5
CHE-12B* Organic Chemistry II	5
MAT-1A* Calculus I	4
MAT 1B* Calculus II	4
PHY-4A* Mechanics	4
PHY-4B* Electricity and Magnetism	4

**Courses may also be used to fulfill general education requirements for the IGETC for STEM pattern, please confer with a counselor.*

Associate in Science for Transfer Degree

The Associate in Science in Chemistry for Transfer degree will be awarded upon completion of 60 California State University (CSU) transferable units including the above major requirements and the Intersegmental General Education Transfer Curriculum (IGETC) or California State University General Education (CSUGE) requirements and with a minimum grade point average of 2.0. All courses in the major must be completed with a grade of "C" or better (or a "P" if taken as Pass/No Pass).

IGETC for STEM

Students pursuing certain Associate Degrees for Transfer may be eligible to complete IGETC for STEM, deferring two to three lower division GE courses until after transfer. IGETC for STEM is applicable only to majors in which the Transfer Model Curriculum explicitly indicates the availability of the option. At Riverside City College, currently only ADT's in Biology, Chemistry, and Environmental Science allow IGETC for STEM.

"IGETC for STEM" certification as part of an Associate Degree for Transfer in Biology would require that students complete the following courses before transfer:

- All courses in Areas 1, 2, and 5 of the traditional IGETC; **AND**
- One course in Area 3A; and
- 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.