CHEMISTRY, ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER

Banner Code: 2_AST_CHEM Control Number: 43096 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.
- Interpret experimental information, develop relationships, and correlate that experimental information with chemical theories.
- 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 degreeapplicable 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 Semester 1 | Title | Units |
|------------------------------------|--|-------|
| 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 |
| Units | | 13 |
| | | |

| 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 |
| Units | | 10 |

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