

Chemistry Department

DEGREES:

Chemistry (AS)

COURSES:

CHEM (Chemistry)

CONTACT INFORMATION:

School of Mathematics and Sciences

Building: 2700 Room 2719B

Phone Number: (707) 864-7110

Fax Number: (707) 646-2054

Dean: Joseph Ryan

Administrative Assistants:

Mathematics: Kayla Kaywood

Sciences: Kelsi Mundell

Faculty Contact:

Kathleen "Kathy" Conrad

Vahid Eskandari

John Higashi

Kiran Kaur

Oanh Lam

Maria Santiago

P.A.C.E. - HEALTH AND HUMAN SERVICES- A PATHWAY FOR ACADEMIC AND CAREER EXCELLENCE AT SOLANO COMMUNITY COLLEGE

ARE YOU THE KIND OF PERSON WHO...

- ...desires to inform, enlighten, help, teach, counsel, or cure people?
- ...enjoys using your skills to serve people?
- ...Likes to work hands-on with objects, machines, and tools and/or use your physical or athletic abilities?
- ...is interested in working in a medical environment?

P.A.C.E. - SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS - A PATHWAY FOR ACADEMIC AND CAREER EXCELLENCE AT SOLANO COMMUNITY COLLEGE

ARE YOU THE KIND OF PERSON WHO...

- ...desires to observe, learn, analyze, evaluate, or solve problems?
- ...enjoys to question and explore physical or biological happenings?
- ...likes to work hands-on with objects, machines, tools, plants, or animals?
- ...is interested in math and/or thinking analytically to solve complex problems?

Guided Pathways: **CHEMISTRY AS**

Associate in Science | GE Pattern: IGETC | Program Total Units: 61 - 63

This program map represents **one possible pathway**. See a counselor to create a customized education plan. Map is for the 2021-2022 catalog year.

Career Paths

Biochemist and Biophysicist • Biochemical Engineer • Chemist • Chemical Engineer • Chemistry Teacher • Chemical Plant and System Operator

What your potential plan could look like...

1 First Semester Total Recommended Units: 15

ENGL 001 4 units
College Composition (IGETC 1A)

LR 010 1 unit
Introduction to Library Research

MATH 020 5 units
Analytic Geometry & Calculus (IGETC 2)

CHEM 001 5 unit
General Chemistry I (IGETC 5A/5C)

3 Third Semester Total Recommended Units: 14

CHEM 003 5 units
Organic Chemistry I

COMM 001, 002, or 006 3 units
(IGETC 1C)

ART 012, CINA 011, MUSC 013, or THEA 013 3 units
(IGETC 3A/Cross Cultural)

HIST 017, 018, 028, 029, or 037 3 units
(IGETC 3B/American Institutions)

Square, darker color:
Required Courses/
Courses in Discipline

Rounded, lighter color:
GE Courses/Categories

2 Second Semester Total Recommended Units: 14

CHEM 002 5 units
General Chemistry II

PHYS 002 or PHYS 006 5 units
Gen Phys non-calculus or Phys for Science Engineering I*

ENGL 002 or 004 4 units
(IGETC 1B)

4 Fourth Semester Total Recommended Units: 14-16

CHEM 004 5 units
Organic Chemistry II

IGETC 5B 3 - 5 units
Suggested: BIO 002

IGETC 3A or 3B 3 units

IGETC 4 3 units

Courses Below May Be Taken Any Time (Fall, Spring or Summer) Total Recommended Units: 6

PLSC 001 or 005 3 units
(IGETC 4/American Institutions)

(IGETC 4) 3 units
Suggested: PSYC 001 or SOC 001

*If you plan to transfer, please see a counselor to ensure you are taking the correct courses. A CHEM BA degree will require PHYS 002; a CHEM BS degree will require MATH 021 and PHYS 006 (and possibly additional courses not listed on this template).

Chemistry

Chemistry

Associate in Science

Program Description

This program is designed to foster an understanding of the fundamental principles of chemistry in a variety of applications. Students will learn how chemical knowledge is derived, theorized, and applied in solving problems in everyday life.

The Associate in Science can be obtained by completing the 26-30-unit major, General Education, and electives as needed to complete a minimum of 60 units. All courses in the major must be completed with a minimum grade of C or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes

Students who complete the Chemistry Associate in Science will be able to:

1. Demonstrate skills for various lab techniques.
2. Formulate and write names applying International Union of Pure and Applied Chemistry rules for chemical compounds.
3. Interpret and analyze chemical data.
4. Identify and write different types of chemical reactions.

REQUIRED COURSES	Units
CHEM 001 General Chemistry I	5
CHEM 002 General Chemistry II	5
CHEM 003 Organic Chemistry I	5
CHEM 004 Organic Chemistry II	5
BIO (any course except 048 or 098).....	3-5
One course from List A	3-5
Required Major Total Units.....	26-30

List A: (select one course)	Units
PHYS 002 General Physics (Non-calculus)	5
PHYS 006 Physics for Science and Engineering.....	5
PHYS 010 Descriptive Physics	3