

# CHEMISTRY, ASSOCIATE IN SCIENCE DEGREE

Financial Aid Eligible  
Banner Code: 1\_AS\_CHEM  
Control Number: 04026

The Chemistry Associate of Science degree is intended to instill a desire in our students to learn more about chemistry through scientific study, encourage critical thinking about how chemistry impacts the natural world, and help students become scientifically literate citizens who can make informed decisions about chemistry-related issues.

## Program Outcomes

1. Students will be able to understand and apply the Scientific Method, including the abilities to demonstrate critical thinking skills, and to draw sound conclusions from collected data and observations.
2. Students will demonstrate content knowledge about chemistry, including knowledge of basic chemical terminology and an understanding of fundamental concepts in chemistry.
3. Students will be able to use appropriate laboratory techniques, equipment, and instruments proficiently. Skills to be mastered shall be determined by the chemistry faculty.

## Associate in Science Degree Requirements

1. **UNIT REQUIREMENT** - 60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.
2. **MAJOR REQUIREMENT** - Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.
3. **MATHEMATICS REQUIREMENT** - Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college-level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.
4. **GENERAL EDUCATION REQUIREMENT** - Students may choose to complete Option 1 (OCC AA GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-arts-general-education-option-1/>), Option 1 (OCC AS GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-science-general-education-option-1/>), Option 2 (CSU GE) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-2/>), or Option 3 (IGETC) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>) (<https://catalog.cccd.edu/orange-coast/general-education-patterns/associate-degree-general-education-option-3/>) to satisfy the general education requirement. See

the General Education Patterns section of this catalog for more information.

Course	Title	Units
<b>Required Courses</b>		
CHEM A180	General Chemistry A	5
CHEM A185	General Chemistry B	5
CHEM A220	Organic Chemistry A	3
CHEM A220L	Organic Chemistry A Lab	2
CHEM A225	Organic Chemistry B	3
CHEM A225L	Organic Chemistry B Laboratory	2
<b>Program Major Units</b>		20
AS General Education Option 1, 2, or 3		Varies
Transferable electives as needed to satisfy unit requirement		Varies
<b>Total Units</b>		<b>60</b>