

CHEMISTRY, ASSOCIATE IN SCIENCE DEGREE

Banner Code: 1_AS_CHEM
Financial Aid Eligible

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.

Review Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/associate-degree/>) and General Education (<https://catalog.cccd.edu/orange-coast/general-education-patterns/>).

Course	Title	Units
Required Courses		
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
<i>Program Major Units</i>		20
<i>AS General Education Option 1, 2, or 3</i>		<i>Varies</i>
<i>Transferable electives as needed to satisfy unit requirement</i>		<i>Varies</i>
Total Units		60

Program Sequence

These sequences at Orange Coast College are general course curriculum maps for students to finish all major and general education requirements for two-year completion of degrees, and/or fulfillment of transfer requirements. The course sequence may include course prerequisites and other placement requirements. **Students are advised to meet with an Orange Coast College Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.**

Course	Title	Units
Year 1		
Semester 1		
CHEM A180	General Chemistry A	5

Course	Title	Units
OCC AS GE AREA A1- CHOOSE ONE		3
OCC AS GE AREA C1- CHOOSE ONE		3
OCC AS GE AREA D- CHOOSE ONE		3
Units		14
Semester 2		
CHEM A185	General Chemistry B	5
Select one of the following or satisfy Math competency (completion of High School Algebra 2 with a "C" or better): ¹		3-4
MATH A030 or MATH A045	Intermediate Algebra or Combined Elementary and Intermediate Algebra	
OCC AS GE AREA C2- CHOOSE ONE		3
ELECTIVES (DEGREE APPLICABLE)		4
Units		15-16
Year 2		
Semester 1		
CHEM A220	Organic Chemistry A	3
CHEM A220L	Organic Chemistry A Lab	2
OCC AS GE AREA A2- CHOOSE ONE ²		3-4
ELECTIVES (DEGREE APPLICABLE)		6
Units		14-15
Semester 2		
CHEM A225	Organic Chemistry B	3
CHEM A225L	Organic Chemistry B Laboratory	2
ELECTIVES (DEGREE APPLICABLE) ³		12
Units		17
Total Units		60-62

¹ Math A030 or higher OR take 3-4 degree applicable elective units if math competency was met through completion of High School Algebra 2 with a "C" or better; *100-level Math courses satisfy AS Math Requirement and OCC AS GE AREA A2

² OCC AS GE AREA A2 - Required if 100-level MATH will not be taken to meet Math competency. If MATH A100 or higher will be taken, then needs to take 3-4 degree applicable elective units

³ VARIES TO REACH MINIMUM 60 DEGREE APPLICABLE UNITS

Additional Notations:

Elective units may be chosen toward a different GE pattern, Transfer Major requirements or degree electives depending on goal.