



Chemistry is the science that deals with the composition, structure, and properties of matter and with the changes matter undergoes. There are many different employment opportunities open to chemists. A chemist can work in a laboratory or research environment asking questions and testing hypotheses with experiments. Another possibility for a chemist is to work on a computer developing theories or models or to predict reactions. Some chemists do field work, others contribute advice on chemistry for projects. Some chemists write. Some chemists teach, while others use chemistry to enter the medical field. The requirements for the A.A. degree in Chemistry are satisfactory completion of a minimum of 60 semester units of which 30 semester units must be the required major courses shown below. The additional minimum of 30 units is to be chosen from the general education degree requirements found in the Oxnard College catalog. Students who plan to transfer to a four-year university should consult the CSU-GE or IGETC pattern for general education. This degree is designed primarily for students who wish to transfer to CSUCI into the B.A. program in Chemistry, B.S. program in Chemistry or B.S. program in Chemistry with a Biochemistry option. For more information contact: Yong Ma (805) 678-5053 yma@vcccd.edu or Dr. Anna Toy-Palmer (805) 678-5205 atoypalmer@vcccd.edu

REQUIRED CORE CLASSES		UNITS
CHEM R120	General Chemistry I <i>Prerequisites: CHEM R110 and MATH R015 or MATH R005 or MATH R014 or MATH R033 or placement as determined by the college's multiple measures assessment process</i>	5.0
CHEM R122	General Chemistry II <i>Prerequisites: CHEM R120</i>	5.0
MATH R120	Calculus with Analytic Geometry I <i>Prerequisites: MATH R115 and MATH R116 or MATH R117 or placement as determined by the college's multiple measures assessment process</i>	5.0

REQUIRED ADDITIONAL COURSES (5 units)		
Complete a minimum of 5 units from the Following		
CHEM R130	Organic Chemistry I <i>Prerequisites: CHEM R122</i>	5.0
CHEM R112	Elementary Organic and Biological Chemistry <i>Prerequisites: CHEM R110 or CHEM R120</i>	5.0

Complete a minimum of 10 units from the following sequences:

}	PHYS R121	Physics with Calculus 1 <i>Prerequisites: MATH R120</i>	5.0
	PHYS R122	Physics with Calculus 2 <i>Prerequisites: MATH R121 and PHYS R121</i>	5.0
-OR-			
}	PHYS R101	College Physics 1 <i>Prerequisites: MATH R116</i>	4.0
	PHYS R101L	College Physics 1 Laboratory <i>Prerequisites: PHYS R101 or concurrent enrollment</i>	1.0
	PHYS R102	College Physics 2 <i>Prerequisites: PHYS R101</i>	4.0
	PHYS R102L	College Physics 2 Laboratory <i>Prerequisites: PHYS R102 or concurrent enrollment</i>	1.0

Total Required Major Units	30.0
Oxnard College General Education Pattern	29.0
Double-Counted Units	-(6.0)
Degree-Applicable Electives (needed to reach 60 units)	7.0
Total Units required for the A.A. Degree	60.0

***Transfer notes: If students plan to transfer to California State University Channel Islands to major in Chemistry, it is advised that they complete CHEM R130 and CHEM R132 prior to transfer. These are required courses for the B.A. or the B.S. in Chemistry at CSUCI as well as most B.A. or B.S. degree programs in chemistry or biochemistry at other four-year universities. **University of California Credit Limitation on Transfer of Chemistry Courses. The UC will not give credit for CHEM R104 or CHEM R110 if taken after CHEM R120. No credit will be given for CHEM R112 if taken after CHEM R130.**

★ **General Education: A.S./A.A. degrees require completion of the Oxnard College General Education pattern**