



CHEMISTRY

Associate in Arts Degree

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 Chemistry program offers two Associate degrees: Associate in Arts (A.A.) AND Associate in Science (A.S.). The courses in this program can prepare students to transfer to Bachelor of Arts or Bachelor of Science degree programs in Chemistry. To earn an Associate degree with a major in Chemistry, students must complete the core courses listed below, plus general education degree requirements. These major requirements help prepare students for upper-division course work for bachelor degrees and advanced degrees in chemistry offered by four-year institutions. Since the course work in chemistry is sequential, students may spend less time earning an associate degree by giving priority to the requirements for a major in chemistry. Earning an Associate degree in Chemistry suggests an achievement of technical skills that may be helpful in seeking immediate employment. Universities differ slightly in requirements for the Bachelor of Arts degree in Chemistry and the Bachelor of Science degree in Chemistry or Biochemistry. The Counseling Department or a member of the Science Department faculty can help students plan their coursework at Oxnard College so students have a smooth transition to the university of his or her choice. Students are advised to refer to the official articulation agreements on www.assist.org for the most current requirements of their intended transfer institution. 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 Courses		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>*Prerequisites: MATH R115 or MATH R116 or MATH R117 or placement as determined by the college's multiple measures assessment process</i>	5.0

Required Additional Courses:

Complete a minimum of **5 units** from:

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</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
Oxnard College General Education	29
Double-Counted Units	-(6)
Free Electives Required	+ 7
Total units required for the AA Degree	60.0