

Chemistry



While in HIGH SCHOOL:

Take as many **MATH and SCIENCE classes** as possible, including PHYSICS.

Then attend MINERAL AREA COLLEGE

At Mineral Area College you will **earn an Associates of Arts degree**. Then transfer to a four-year institution where you will earn a Bachelor of Science in Chemistry.

At MAC you will take:

GENERAL EDUCATION courses

as well as:

GENERAL CHEMISTRY I and II
QUALITATIVE ANALYSIS
ORGANIC CHEMISTRY I and II

CALCULUS and PHYSICS



- ✚ Highly Qualified Accessible Faculty
- ✚ Small Class Size
- ✚ Scholarship Opportunities
- ✚ Honors Option Classes

Low Cost --- High Quality Education

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<http://www.mineralarea.edu/faculty/academic/Departments/science.aspx>

Suggested Course of Study:
See Associate of Arts Degree Plan
for specific courses and requirements.

Fall Semester – 17 hours	
PHS1350 General Chemistry I	5 hours
MAT1650 Calculus I	5 hours
Eng1330 English Comp I	3 hours
History/Political Science or Humanities Course or Computer Information Systems or Social/Behavioral Science	3 hours
Physical Education	1 hour

Spring Semester – 18 hours	
PHS1390 General Chemistry II	4 hours
PHS1380 Qualitative Analysis	2 hours
MAT2150 Calculus II	5 hours
PHS2230 General Physics I	4 hours
Eng1340 English Comp II	3 hours

Summer Semester – 6 hours	
History/Political Science or Humanities Course or Computer Information Systems or Social/Behavioral Science	6 hours

Fall Semester – 18 hours	
PHS2350 Organic Chemistry I	5 hours
MAT2250 Calculus III	5 hours
PHS2240 General Physics II	4 hours
Eng1440 Public Speaking or ENG1670 Interper Comm or ENG2000 Oral Interpre of Lit	3 hours
Physical Education	1 hour

Spring Semester – 17 hours	
PHS2360 Organic Chemistry II	5 hours
MAT2330 Differential Equations	3 hours
History/Political Science or Humanities Course or Computer Information Systems or Social/Behavioral Science	6 hours
Biological Science	3 hours

Summer Semester – 6 hours	
History/Political Science or Humanities Course or Computer Information Systems or Social/Behavioral Science	6 hours



Mineral Area College

Serving Communities Since 1922

Mineral Area College does not discriminate on the basis of race, color, national origin, gender, disability, age, religion, creed, or marital or parental status. For more information, call the Title VI, Title IX, Sec. 504 and ADA coordinator at (573) 431-4593 or U.S. Dept. of Education, Office of Civil Rights.

Career Opportunities in CHEMISTRY

Information from the American Chemical Society Web Page: www.acs.org

From the ACS home page choose CAREERS and then What Chemists Do

BIOTECH / ENVIRONMENTAL CHEMISTRY

study life processes for obtaining food, regulate the safe use of chemicals, develop drugs and agricultural chemicals, test for the impact and fate of compounds in food and the environment, develop remediation programs, change production processes to yield a more environmentally friendly product, provide expert advice on safety and emergency response, or deal with government regulations and compliance issues, monitor a given ecosystem or industrial process, discover the impact of water on other elements of a system and how these elements affect the quality of the water

CHEMICAL EDUCATION

give lectures, conduct discussions, organize and supervise labs, lead field trips, review professional journals, carry out and publish independent research, write textbooks, develop classes and lab experiments, and work with students on research projects

CONSUMER PRODUCT CHEMISTRY

develop tests that model the end use of a product developed, relate chemical structure and formulation composition to product performance, determine how well a product will work in a customer's formulation

FOOD AND FLAVOR CHEMISTRY

determine how proteins, fats, starches, carbohydrates, additives, and flavorants work in a food system, develop new ingredients such as fat or sugar replacements, develop flavors using natural or artificial ingredients

FORENSIC CHEMISTRY

analyze evidence found at crime scenes or on/in the bodies of crime suspects, provide evidence in court

GEOCHEMISTRY

study the occurrence and distribution of chemical elements in rocks and minerals, study the movement of these elements into soil and water systems, develop natural resource use and environmental management policies

SCIENCE WRITING

write and review articles and proposals, develop ideas for new books, report on discoveries presented at technology conferences, interview scientists

TEXTILE CHEMISTRY

dyeing and finishing chemistry, fiber and polymer chemistry, blending of textile materials