

# CHEMISTRY

Chemistry impacts our everyday lives, from the medicines we take and the cleaning products we use to how we heat our homes and how we grow our food. This makes chemistry a valuable and versatile degree that will serve you well in many industries, whether you analyze problems in a lab or to formulate a new product for the marketplace.

This major also gives you the skills and knowledge to be an informed citizen and community leader in addressing health and environmental issues. You'll learn how to carefully and accurately analyze scientific data to make decisions grounded in science.



## The Alverno edge

Alverno is internationally known for its unique abilities-based curriculum. You'll strive to achieve your personal best — practicing the hands-on skills you need to be a strong communicator, leader, critical thinker and problem-solver. At Alverno, you'll practice presenting your work in every course, so you'll be polished and able to speak well on your feet once you're at a job interview or sharing your research findings with colleagues. Alverno's emphasis on group work will also help you stand out as a team player.

## DIY experiments

As early as your freshman year, you'll work collaboratively and independently on investigations of your choosing, as you design, implement and evaluate your own experiments. Along the way, you'll have access to state-of-the-art lab equipment and learn green chemistry principles to reduce or eliminate hazardous substances generated by your work.

## The support you need to succeed

Forget about giant lecture halls or vying for face time with professors. Alverno's 10-to-1 student-to-faculty ratio and small class sizes ensure you'll really get to know our faculty, and that personal connection allows professors to guide you toward meaningful internships that will help you reach your goals. In addition to faculty support, Alverno students gain valuable insight and experience through peer mentoring opportunities.

## Get involved

Looking for more experiences outside of the classroom? Join one of Alverno's student organizations to practice your leadership skills. You can also put your science skills to use (while getting paid) as a lab assistant, a tutor in the Daniel M. Soref Science and Mathematics Resource Center or a mentor for high school

WHERE CAN A  
CHEMISTRY DEGREE  
TAKE YOU ...

ANALYTICAL CHEMIST

CHEMICAL ENGINEER

CHEMISTRY TEACHER

FOOD/FLAVORING CHEMIST

FORMULATION CHEMIST

FORENSIC SCIENTIST

LABORATORY TECHNOLOGIST

MEDICINAL CHEMIST

PHARMACIST

PHARMACEUTICAL REPRESENTATIVE

PHYSICIAN

PULP AND PAPER CHEMIST

RESEARCH CHEMIST

TOXICOLOGIST

## SAMPLE CURRICULUM

Chemistry of Bioorganic Molecules  
 Calculus 1  
 Calculus 2  
 Organic Chemistry  
 Analytical Chemistry/Quantitative Analysis  
 Chemistry of Inorganic Materials  
 Biochemistry  
 Organic Chemistry 2  
 Calculus-Based Physics 1  
 Calculus-Based Physics 2  
 Instrumental Methods of Analysis  
 Biochemistry of Micronutrients  
 Physical Chemistry 1  
 Physical Chemistry 2  
 Internship Seminar  
 Chemistry Professional Portfolio

students through Alverno's Girls' Academy of Science & Mathematics. Some students work closely with faculty on research, and our student researchers also travel with faculty to professional conferences to present their work.

### Internships for the Chemistry major

Every Chemistry major has at least one internship opportunity. Students have interned at many sites, including the Milwaukee Metropolitan Sewerage District, Sigma Aldrich, the Medical College of Wisconsin, the Water Technology Accelerator at the Global Water Center and Denali Ingredients.

### How you can use your degree

With a strong foundation in chemistry, you'll be prepared to work in a variety of fields such as biotechnology, environmental chemistry, forensic science, food and flavor chemistry, hazardous waste management and materials science. You can tailor your studies to your interests through a wide range of minors, including Environmental Science, Business Analysis and Mathematics. Almost all of our students are hired for scientific positions immediately after graduation, many by their internship sites. Others go on to graduate or professional school. Your chemistry background might also take you in an unexpected direction, such as patent law or

OVERSET TEXT

## Why study Chemistry at Alverno?

"The professors are very supportive. They constantly pushed me to reach and give my best. They believe we can do more, and they are there to help us all the way. The experience at Alverno also helped me become professional and persistent. The extra research and individual lab work gave me the tools to successfully work in a laboratory with accurate and precise data, keeping in mind the safety in our environment." — Irma Quezada Melchor '17, laboratory technician at the Milwaukee Metropolitan Sewerage District

### GET IN TOUCH!

Have questions about studying Chemistry at Alverno? We invite you to connect with faculty to learn more.

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