



# CHEMISTRY

## UW-EAU CLAIRE UNDERGRADUATE FACT SHEET

Chemistry encompasses a study of the composition, structure and properties of matter. It includes the creation of new materials with useful and interesting properties such as drugs, plastics and industrial catalysts. Chemical methods are developed to detect and quantify substances that may have escaped into the environment or are beneficial trace components of foods. Chemical theories and models may help explain and then counteract phenomena like acid rain, ozone depletion and the development of certain diseases. Careers in chemistry can take many forms. UW-Eau Claire has developed four major emphases under the guidance of the American Chemical Society to meet the needs of students and the society they will serve.

### WHY STUDY CHEMISTRY?

- As a chemistry major, you'll be prepared for many different roles in science and often advance quickly in your career because of the major's broad, multidisciplinary nature and your ability to transfer knowledge between scientific disciplines.
- You'll find an array of career options and opportunities available to you including the technical areas of industrial and biotech research, product development and environmental protection, forensic chemistry, teaching, chemical sales and marketing.
- Medical, dental and veterinary professional schools require a very strong background in chemistry, and many students choose chemistry majors because of the excellent preparation for admission.
- Chemistry graduates have a higher success rate at getting into medical school as compared to any other

science major.

- With an education in chemistry, you'll establish a background to go into areas such as patent law, science writing or pharmacy.
- The logic and analytical skills developed in chemistry will enhance your ability to find solutions in any field.

### THE EAU CLAIRE ADVANTAGE

- The UW-Eau Claire chemistry department is nationally recognized as one of the top chemistry departments in the country.
- The UW-Eau Claire department of chemistry and the comprehensive A.C.S. chemistry major are certified by the American Chemical Society.

### UW-EAU CLAIRE FACTS AT A GLANCE

- Location: Eau Claire, Wis.; city pop. 64,000, metro. pop. 151,000
- Average enrollment: 10,500
- Undergraduates: 10,063
- Graduate students: 503
- International students: 124
- Multicultural students: 485
- Average men-women ratio: 2-to-3
- Students who spend at least a semester studying abroad: 24%
- Students doing undergraduate research with faculty/staff: 710+
- ACT composite average: 24+
- Average high school rank: 77%
- Average class size: 28
- Faculty-student ratio: 1-to-20
- Computers-student ratio: 1-to-9
- Student organizations: 224
- Walk across campus: About 10 minutes
- Nickname: Blugolds
- Colors: Navy and old gold

- UW-Eau Claire ranks in the top 2 percent of undergraduate chemistry programs nationwide in the number of graduates going on to obtain chemistry Ph.D.s.
- UW-Eau Claire ranked No. 1 in the United States among 600 Masters I and II institutions for the baccalaureate origins of Ph.D. chemists in a recent 10-year period (1988-1998).
- Three UW-Eau Claire chemistry faculty members have received prestigious Dreyfus Teacher-Scholar Awards, more than any other public liberal arts or comprehensive institution in the country.
- The department has a long tradition of productive collaborative research between undergraduate students and faculty, culminating in more than 120 published papers in peer-reviewed journals and presentations at regional, national and international meetings. Research positions in the department are often paid over the summer or academic year, providing more than \$350,000 in student salaries over the past five years.
- The department has state-of-the-art equipment and instrumentation to which all chemistry majors have access during their studies.
- Professors, all of whom have doctoral degrees, teach all chemistry classes.
- Classes are small and faculty members are readily accessible outside class hours.
- Upper-division students are provided the opportunity to interact with leading figures in the chemical sciences through our seminar program.
- The award-winning student affiliate chapter of the American Chemical Society offers opportunities to visit

graduate and professional schools, and industrial and government employers as well as many social and professional activities throughout the year.

- The on-campus Pre-Med Club draws together students with a common interest in the field of medicine. The club provides students with information about the MCAT and the application process to medical schools, provides informative speakers to discuss career opportunities, organizes mentoring programs and more.

## CAREER OPTIONS

- Become a research chemist and investigate and evaluate new ideas, theories and materials for a corporation.
- Work as a product development chemist and develop products for industry or government
- Work for an environmental-related agency.
- Teach chemistry at the secondary level, or obtain your master's and doctorate degrees and teach at a college or university or work in industry.
- Combine chemistry and business for a position in sales, marketing or technical service.
- Become a physician or dentist, combining your science aptitude with patient care.

## UNDERGRADUATE PROGRAMS

To meet the needs of students and the society they will serve, the UW-Eau Claire chemistry department has developed four major emphases under the guidance of the American Chemical Society. Broad professional options are provided by the A.C.S. and liberal arts majors which allow entry into all fields of physical and life-sciences. The teaching and chemistry/with business emphasis majors offer opportunities for some specialization. Opportunities in biochemistry and molecular biology are available in a comprehensive major provided by the biology and chemistry departments.

The latter program also is an effective entry point to graduate programs in pharmacology, molecular biology and medical, dental and veterinary schools.

## HIGH SCHOOL PREPARATION

- The typical entry in the chemistry major track is Chemistry 115. To be enrolled in Chemistry 115, the student is expected to have completed high school chemistry and mathematics with a reasonable proficiency. Students entering without high school chemistry or mathematics will find that they are not well prepared. Such students do have the option of entering a slower track sequence, which begins with Chemistry 103.
- All students who enroll at UW-Eau Claire are required to have a minimum of 17 college preparatory units including:
  - 4 years of English (at least 3 composition and literature)
  - 2 years of a single foreign language
  - 3 years of math (algebra, geometry, 1 advanced college preparatory math)
  - 3 years of natural science
  - 3 years of social science (1 must be world or American history)
  - 2 additional units in the areas already mentioned or other academic areas

## FRESHMAN COURSE WORK

### Sample First Year

#### FALL SEMESTER

COURSE#	TITLE	CREDIT
Chem 115	Chemical Principles	6
Math 114	Calculus and Analytic Geometry I	4
Engl 110	Introduction to College Writing	5
General education course		0-3

#### SPRING SEMESTER

Chem 218	Introduction to Inorganic Chemistry	3
Math 215	Calculus and Analytic Geometry II	4
General education courses		6-9

## FOR MORE INFORMATION

For more information about the chemistry program:

### CHEMISTRY

Phillips Hall 430  
UW-Eau Claire  
Eau Claire, WI 54702-4004  
715-836-4746  
[www.uwec.edu/chemistry](http://www.uwec.edu/chemistry)

For more information about campus including costs, housing, admission requirements and tours:

### ADMISSIONS

Schofield Hall 112  
UW-Eau Claire  
Eau Claire, WI 54702-4004  
715-836-5415  
[admissions@uwec.edu](mailto:admissions@uwec.edu)  
[www.uwec.edu/admissions](http://www.uwec.edu/admissions)



Experience the Eau Claire Advantage.