

# Chemistry/Chemistry Education

*B.S. - Bachelor of Science, B.S. Ed. - Bachelor of Science in Education*

Mayville State University Chemistry/Chemistry Education students can expect to spend a lot of quality time working in the laboratory. Our chemistry program boasts small class sizes, direct instruction and continuity from class to lab. These benefits will give you big benefits and will directly impact your future should you choose to attend graduate school, lead a research project or educate students in a public school setting.



At Mayville State, we give you more of just about everything.

### *A Little More Personal*

We pride ourselves on being just the right size to give students the time they deserve.

### *A Little More Opportunity*

You'll get the opportunity to develop your leadership skills to help you succeed in your career after graduating.

### *A Little More Success*

Our students get jobs. Period. We also have internship opportunities to give you real, hands-on learning experiences and make your resume stand out.

### The Program

Mayville State's Chemistry programs will prepare you for many career and educational opportunities. The programs offer opportunities for research involvement and active participation in the science community. Mayville State's Chemistry programs will prepare students for working in the lab, pursuing graduate studies in chemistry and/or attending medical, veterinary or other professional schools.

### Advantages

Hands-on lab experience - Unlike many other undergraduate programs in chemistry where hands-on laboratories are becoming increasingly rare, Mayville State emphasizes strong lab components. State-of-the-art instruments are used to ensure modern research.

Undergraduate research opportunities -

In many programs, research opportunities are limited to graduate students, but at Mayville State we're focused on your success as an undergraduate. That's why our program offers you the opportunity to participate in research projects and to get involved in the science community.



### *Become a Comet VIP!*

Get a little more informed.

[www.mayvillestate.edu/become\\_a\\_student](http://www.mayvillestate.edu/become_a_student)



# A Little More for your college experience

## Chemistry/Chemistry Education

### A Word About Our Grads

MSU's graduates in Chemistry/Chemistry Education find many careers. Students who plan to enter the workforce in areas like hydrology, waste water treatment, ground water chemists or geologists, agricultural chemists and even biochemistry areas like pharmacology, microbiology or clinical chemistry do so upon graduation. Our graduates are prepared to successfully continue on to graduate school and professional schools.

Mayville State Chemistry graduates have gone onto graduate, medical, veterinary and pharmacy schools in California, Nebraska, Minnesota and North Dakota.



### Chemistry - Bachelor of Science

This major provides the student with the knowledge, skills and techniques commensurate with a Bachelor of Science in Chemistry. The student pursuing this degree may plan a professional or industrial vocation or pursue a graduate degree. The student must complete 36 semester hours of general education courses and the chemistry core listed below while maintaining a GPA of 2.50 in the core courses. The MSU Bachelor of Science degree requires completion of at least a minor program in a supporting area in conjunction with the major.

#### Core Requirements

CHEM 121	General Chemistry I.....	4
CHEM 122	General Chemistry II.....	4
CHEM 330/L	Quant. Analysis I/Lab.....	4
CHEM 341/L	Organic Chemistry I/Lab.....	5
CHEM 342/L	Organic Chemistry II/Lab.....	5
CHEM 360/L	Elements of Biochemistry.....	4
CHEM 466/L	Survey of Phys. Chem/Lab.....	4
CHEM 480S	Chemistry Comp.....	1
MATH 165	Calculus I.....	4
MATH 323	Probability & Statistics.....	3

### Chemistry Education

#### Bachelor of Science in Education

This major provides a student with the knowledge and skills essential for teaching science courses in junior and senior high school, with emphasis in chemistry. Students are provided with a broad base of knowledge which permits certification as junior and senior high school science teachers in North Dakota. Students who plan to teach in Minnesota need to complete an additional six semester hours in physics to qualify for certification. A minor is not required with this major. In addition to the core courses listed below, the student must complete EDUC 484-Secondary Methods for Science and the secondary education core required for teacher certification (see Education section of catalog) as well as 36 semester hours of general education courses.

#### Core Requirements

CHEM 121	General Chemistry I.....	4
CHEM 122	General Chemistry II.....	4
CHEM 330/L	Quant. Analysis I/Lab.....	4
CHEM 341/L	Organic Chemistry I/Lab.....	5
CHEM 360/L	Elements of Biochemistry.....	4
CHEM 466/L	Survey of Phys. Chem./Lab.....	4
CHEM 480S	Chemistry Comp.....	1
BIOL 150	General Biology I.....	4
BIOL 151	General Biology II.....	4
MATH 165	Calculus I.....	4
MATH 323	Probability & Statistics.....	3
PHYS 110	Astronomy.....	4
PHYS 211/L	College Physics I/Lab.....	4
PHYS 212/L	College Physics II/Lab.....	4
SCNC 322	Environmental Science.....	3
BIOL	Electives.....	4
	Earth Sci. Elective (GEOL 115 or ASTR 50).....	4

