

Chemistry Education • Bachelor of Science

Why Choose Chemistry Education?

Chemistry teachers guide students in discovering the marvelous logic, efficient simplicity and design behind a myriad of complex events in nature. The technological revolution has added an infectious new excitement to the lessons of chemistry. Chemistry education today provides access to new knowledge, helping people understand how things happen in the natural and physical environment.

The employment outlook for chemistry education students is excellent. Graduates are prepared to teach in high schools and also have the necessary basic preparation to enter a career in industry or pursue an advanced degree in science. One semester of directed teaching at the secondary level is required. A teaching minor is also required.

Professional Opportunities

Chemistry education is a four-year curriculum that may be selected as a major. A teaching minor is also required. You cannot have a chemistry teaching minor with this teaching major. Successful completion of the program leads to recommendation for a Michigan Secondary Provisional Certificate. The program is designed to take full advantage of the unusual, hands-on Ferris instructional capabilities in developing both teaching and subject matter competency. Students receive the broad background in classroom, laboratory and field training essential to be effective teachers.

Admission Requirements

High school students and transfer students with 29 credit hours or less must possess a high school grade point average of 2.25 (on a 4.0 scale) or an ACT composite score of 15. Transfer students with 30 credit hours or more must possess a 2.0 cumulative GPA. Students transferring into the program with completed majors or minors must have the appropriate GPA as established by each department. Consult individual program description for other admission requirements.

Teacher Certification Requirements

As required by the State of Michigan to receive teacher certification, all teacher candidates must: (1) pass the Michigan Basic Skills Test, (2) pass the pedagogy tests in their subject area majors and minors, and (3) have a 2.50 minimum GPA to receive teacher certification in Michigan. These state requirements are in addition to the FSU graduation requirements of your individual program.

Graduation Requirements

The chemistry education program leads to a Bachelor of Science degree through the School of Education, College of Education & Human Services. Graduates must complete all of FSU's general education, chemistry, and education requirements. Professional education requirements include a semester of directed student teaching. Consult individual program description for other admission requirements.

A 2.50 GPA is required for successful completion of this major.

Required Courses

	Credit Hours
Chemistry Major (48 credit hours)	
CHEM 121 General Chemistry 1 *Z	5
CHEM 122 General Chemistry 2 *Z	5
CHEM 321 Organic Chemistry 1*Z	5
CHEM 322 Organic Chemistry 2*Z	5
CHEM 231 Quantitative Analysis *Z	4
CHEM 317 Instrumental Analysis *Z	3
CHEM 451 Intro to Physical Chemistry*Z	4
CHEM 364 Biochemistry*Z	4
Total	35
Related Requirements (13 hours required)	
MATH 220 Analytical Geometry & Calculus 1	5
PHYS 211 Introductory Physics	4
PHYS 212 Introductory Physics 2*Z	4
Professional Education Sequence	
Level I	
Note: Students seeking admission to teacher education candidacy must meet all university requirements for admission to the specific program they wish to enter.	
EDUC 251 Life Span Human Growth & Dev	3
EDUC 289 Principles of Teaching and Learning	3
Level II	
Note: Prior to admission to the Teacher Education Program and Level II courses, students must pass all sections of the Basic Skills Test, complete all Professional Education Prerequisite courses with a minimum of 2.5 GPA, with no grade lower than a C (2.0), have a 2.5 cumulative GPA, and meet all other program requirements. Students may have no more than two repeats in Level I coursework.	
EDUC 303 School, Work & Society	3
EDUC 308 Teaching Strategies for SPED/Diverse Pop	3
EDUC 339 Instructional Planning and Practice	2
EDUC 430 Instruction Delivery & Evaluation	4
EDUC 439 Instructional Theory into Practice	2
EDUC 443 Teaching Reading/Secondary Areas	3
Level III	
Note: Prior to student teaching and professional seminar (Level III courses), students must obtain the appropriate GPA for their major/minor as established by each department, earn an overall GPA of 2.75 in the professional education courses, have a 2.5 cumulative GPA, and meet all other program requirements.	
EDUC 491 Secondary Directed Teaching	12
EDUC 499 Professional Seminar	2
Total	40

NOTE: STUDENTS MUST OBTAIN THE APPROPRIATE GPA FOR THEIR MAJOR/MINOR AS ESTABLISHED BY EACH DEPARTMENT. A 2.75 GPA IS REQUIRED IN THE PROFESSIONAL EDUCATION COURSE SEQUENCE. A 2.50 CUMULATIVE GPA IS ALSO REQUIRED BEFORE STUDENT TEACHING. NOTE: Though faculty advisors are responsible for advising students regarding degree requirements, it is the student who is ultimately responsible for choosing the correct courses and for following the correct program.



More Information

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FERRIS STATE UNIVERSITY

COLLEGE OF EDUCATION & HUMAN SERVICES