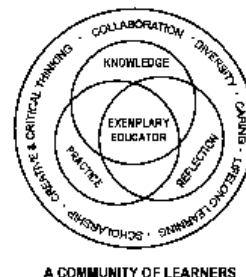




Northern Illinois University



Secondary Teaching in Chemistry Educator Licensure Requirements

The Physical Science licensure programs have been designed to prepare exemplary educators. The experiences candidates are provided will enable them to demonstrate that they meet the Illinois and National Science Teachers Association standards. Individuals completing the programs are sought after as science educators.

It is **NOT** necessary to complete a degree program at NIU at the same time as completing license requirements but you must have a bachelor's degree and the equivalent of a degree in the subject area in which you seek licensure. With one or two possible exceptions (indicated below) it is strongly suggested that all the professional education requirements are completed at NIU. Candidates successfully completing the educator licensure program in chemistry will earn a secondary license (grades 9-12) with a primary endorsement in chemistry.

Admission to Licensure Program

Potential candidates must be admitted to NIU to be admitted to the licensure program. If they are not admitted to the program, they cannot take the required courses in the program nor can they be recommended by NIU for licensure. Potential candidates have the following choices of student classification:

Undergraduate – Choose this option if you do not have a college degree. You should declare to be a chemistry major but do not have to select the chemistry teaching emphasis. Approximately half the students becoming licensed in chemistry are not in an education degree emphasis.

Post-graduate – If you already have an appropriate bachelor degree, you may wish to enroll as a post-graduate. Post-graduates are classified as undergraduate students. They may be pursuing a second bachelor's degree or simply be pursuing a teaching license. They do not have the ability to enroll in graduate level courses. Students often pursue this choice when they do not have an appropriate degree and need to take undergraduate level science courses. It is possible to switch status from post-graduate to either student-at-large or graduate student. You may not switch back once you have done so.

Student-at-Large – Choose this option if you have a bachelor's degree and wish to be able to take some courses for graduate credit. Students pursue this option when they are unsure of whether or not they wish to pursue a Masters Degree or if they don't have time to complete the lengthy application process for admission to a graduate program as a graduate student. Due to recent NIU policies regarding order of registration for classes, this is the least desirable choice. It is always possible to switch status from student-at-large to graduate student.

Graduate student – A graduate student is someone who is pursuing a graduate degree, either masters or doctorate. It is not necessary to complete the degree to complete the educator license program.

To apply to the program please go to: <http://www.niu.edu/elss/how-to-apply/index.shtml>

Applications are accepted January 1st through May 30th, however we prefer to receive them by March 31st.

Tests and Checks

In addition to completing the required coursework, you must also meet the following:

- ✓ **Basic Competency** - Candidates must pass the Test of Academic Proficiency (TAP) to be eligible for admission to the Licensure program. You can find information about this test at the [Illinois Licensure Testing System - TAP test website](#)

In lieu of the TAP test candidates may use their ACT or SAT scores if they meet the following requirements: Composite **ACT** score of 22 or higher AND a minimum of 16 on the Writing portion, OR Composite **SAT** score of 1030 or higher (critical reading and writing) AND minimum score of 450 on Writing portion. All scores must be from one test administration taken on the same date.
- ✓ **Health Checks** - All candidates must take and pass a TB test before entering schools. TB tests are available for free to NIU students at the NIU Health Center and are good for one year. You will need to prove that you do not have TB before your clinical experiences. Because the typical license program takes two years, most students are able to have just two, one before the first clinical experience and another before the third experience.
- ✓ **Criminal Background Checks** - You will need to contact the schools where you will be completing your clinicals to find out the criminal background check procedure for those districts.
- ✓ **ILTS Subject Matter test** - You must successfully pass the ILTS Subject matter test(s) appropriate to your program prior to student teaching. [Illinois Licensure Testing System](#)
- ✓ **edTPA (Teacher Performance Assessment)**- You must successfully pass the **edTPA** during student teaching in order to receive an Illinois teaching license.
- ✓ **Grade Point Average Requirements** – You must have a GPA of at least 2.5 if you are a chemistry undergraduate or 3.0 if you are a graduate student. **All coursework individually specified for licensure including content, must have a grade of C or better.**

Contact Information

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Webpage

<http://www.niu.edu/elss/>

Required Coursework Chemistry Licensure

Completing the following courses should provide you with the evidence necessary to demonstrate that you have met standards. You must complete 30-36 hours of chemistry, 8 hours of physics, 8 hours of mathematics and 3 hours of practical writing. Students must pass all coursework listed below with a grade of C or better. In addition, candidates must pass the ICTS Chemistry Subject Matter Test.

Subject discipline courses: You may have some flexibility in your course selection as long as selections meet the requirements for chemistry educator licensure.

REQUIRED CHEMISTRY COURSES: 30-36 hours total

- _____ CHEM 210, General Chemistry 1 (3)
- _____ CHEM 212, General Chemistry I Lab (1)
- _____ CHEM 211, General Chemistry II (3)
- _____ CHEM 213, General Chemistry II Lab (1)
- _____ CHEM 336, Organic Chemistry I (3)
- _____ CHEM 332, Organic Chemistry I Lab (1)
- _____ CHEM 337, Organic Chemistry II (3)
- _____ CHEM 333, Organic Chemistry II Lab (1)
- _____ CHEM 325, Analytical Chemistry (3)
- _____ CHEM 440, Physical Chemistry (3)
- _____ CHEM 442, Physical Chemistry Lab (1)

3-4 hours CHEM elective, choice of:

- _____ CHEM 425(4), _____ CHEM 460 (3), or _____ CHEM 470(3)

And

4-9 hours of CHEM electives at the CHEM 329 level or above, excluding CHEM 370.

REQUIRED PHYSICS COURSES: 8 hours total

- _____ PHYS 210, General Physics I, including lab (4)
- _____ PHYS 211, General Physics 2, including lab (4)

REQUIRED MATH COURSES: 8 hours total

- _____ MATH 229, Calculus I (4)
- _____ MATH 230, Calculus II (4)

REQUIRED ENGLISH COURSES:

- _____ ENGL 350- practical writing (3)

RECOMMENDED COURSES:

- _____ BIOS 208, Fundamentals of Biology 1 (3) + BIOS 210 Lab (1)
- _____ BIOS 209, Fundamentals of Biology 2 (3) + BIOS 211 Lab (1)
- _____ CSCI 240, Computer programming in C++ (4)
- _____ GEOL 120 Introductory Geology (3) or GEOL 325 Solid Earth composition (4)

Note: Detailed course descriptions can be reviewed from the current NIU Course Catalog. Course equivalents from other accredited institutions may be substituted at the discretion of the Program Director.

GENERAL EDUCATION COURSES MUST INCLUDE:

- _____ Oral Communication (3 hrs)
- _____ Written Communication (3-6 hrs) – ENGL 103/104 or ENGL 103/203 or ENGL 204
- _____ Psychology (3 hrs)

Professional Education

Professional education courses are usually taken during a student's last four semesters before licensure.

- _____ ILAS 201 Introductory Clinical Experience (1 hr)
- _____ ILAS 301 Second Clinical Experience (2 hr)
- _____ CHEM 401 Clinical High School Experience in Chemistry (2 hrs)
- _____ CHEM 493x Interdisciplinary Teaching of Science in Secondary Education (3 hrs)
- _____ CHEM 495x/595x Methods in Teaching Chemistry (3 hrs)
- _____ CHEM 490x The Nature of Science across Time and Cultures (2 hrs)
- _____ CHEM 497/597 Student Teaching (10 hrs)
- _____ CHEM 496/596 Transition to Professional Science Teaching (2 hrs)
- _____ ETT 402 Technology in the Classroom (3hrs)
- _____ LTIC 420/520: Methods and Materials for Teaching English to Speakers of Other Languages (3 hrs)

Note: These courses require formal application to enter. Licensure candidates must pass all course work with a grade of C or better in order to continue in the program.

Educational Theory Courses:

- _____ EPS 406/507 Human Development and Learning, Middle School and High School (3 hrs)
- _____ SESE 457/557 Integrating Exceptional Students in the Regular Classroom (3 hrs)

The schedule of courses in professional education would usually look as follows.

Fall	Spring
Semester 1 <ul style="list-style-type: none">• ILAS 201 (1)• CHEM 490 (2)• ETT 402 (3)• EPS 406 (3)	Semester 2 <ul style="list-style-type: none">• ILAS 301 (2)• CHEM 493 (3)• LTIC 420 (3)
Semester 3 <ul style="list-style-type: none">• CHEM 401 (2)• CHEM 495 (3)• SESE 457 (3)	Semester 4 <ul style="list-style-type: none">• CHEM 496 (2)• CHEM 497 (10)

Contact Information

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