Secondary Teaching in Environmental Science
Teacher Certification Requirements

The Environmental Science licensure program has been designed to prepare exemplary teachers. The experiences candidates are provided will enable them to demonstrate that they meet the Illinois and National Science Teachers Association standards.

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. It is strongly suggested that all the professional education requirements are completed at NIU. Candidates successfully completing the teacher licensure program in Environmental Science will earn a secondary license (grades 9-12) with a primary endorsement in Environmental Science.

**Admission to the Secondary Science Educator Licensure Program**

Potential candidates must be admitted to NIU to be admitted to the certification 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. Potential candidates must declare the environmental studies major with an emphasis in either biodiversity and environmental restoration, water, or energy studies and pursue teacher certification in environmental science.

**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 teacher license program.

To apply to the program please go to: [http://www.niu.edu/elss/how-to-apply/index.shtml](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 1st.
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 [http://www.il.nesinc.com/](http://www.il.nesinc.com/)

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 students 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 - 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.

- ICTS Subject Matter test - You must successfully pass the ICTS Subject matter test(s) appropriate to your program prior to student teaching. [Illinois Certification Testing System](http://www.niu.edu/elss/)

- 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 – Students must have a minimum cumulative GPA of 2.5 and a GPA of 2.7 in NIU courses numbered 200 and above in physical, biological sciences and mathematics. 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/](http://www.niu.edu/elss/)
Required Coursework - Environmental Science

Completing the following courses should provide you with the evidence necessary to demonstrate that you have met the standards. You must complete at least 15 hours in environmental studies, 11 hours in Biology, 8 hours in Chemistry, 8 hours in Physics and 3 hours in Mathematics to become licensed. Students must pass all coursework with a grade of C or better. The hours must include courses in the following required areas:

**Subject discipline courses:** You may have some flexibility in your course selection as long as selections meet the requirements for environmental science teacher certification.

**REQUIRED COURSES: 15 hours total**
- ENVS 301 Environmental Science I: Physical Systems (3)
- ENVS 302 Environmental Science II: Biological Systems (3)
- ENVS 303 Environment in the Social Sciences and Humanities (3)
- ENVS 304 Environmental Law, Policy and Economics (3)
- ENVS 305 Green Technologies (3)

**ELECTIVES: 12 hours total**
- ANTH 314/ENVS 314X - Domesticating the Planet: 100,000 years of Humans and the Environment (3)
- ANTH 425 - Environment and Anthropology (3)
- ANTH 432 - Nature and the Environment Across Cultures (3)
- BIOS 406 - Conservation Biology (4)
- ECON 386 - Environmental Economics (3)
- ENVS 409/BIOS 409X/GEOL 409X - Water Quality (4)
- GEOG 253 - Environment and Society (3)
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 322 - Geography of World Plant Communities (3)
- GEOG 368 - Climate Change: Science, Impacts and Mitigation (3)
- GEOG 315/ENVS 315 - Introduction to Energy (3)
- GEOG 453 - Environmental Management (3)
- GEOG 455 - Land Use Planning (3)
- GEOL 390 - Introduction to Groundwater (3)
- HIST 377 - American Environmental History (3)
- MEE 101 - Energy and the Environment (3)
- PHIL 335 - Environmental Ethics (3)
- POLS 324 - Politics of Environmental, Health, and Safety Regulation (3)
- TECH 245 - Pollution, Pestilence, Prevention and the Cost of Doing Business (3)
- TECH 484 - Energy Management (3)

**REQUIRED BIOLOGY COURSES: 8 hours total**
- BIOS 208/210 Fundamentals of Biology I/Fundamentals of Biology Laboratory I (3/1)
- BIOS 209/211 Fundamentals of Biology II/Fundamentals of Biology Laboratory II (3/1)

**REQUIRED CHEMISTRY COURSES: 8 hours total**
- CHEM 210 General Chemistry 1 (3 hrs)
- CHEM 212 General Chemistry I Lab (1 hr)
- CHEM 211 General Chemistry II (3hrs)
- CHEM 213 General Chemistry II Lab (1hr)

**REQUIRED PHYSICS COURSES: 8 hrs total**
- PHYS 210 General Physics I, including lab (4hrs)
- PHYS 211 General Physics 2, including lab (4hrs)
REQUIRED MATH COURSES: 6-11 hrs total

- Math 211 Calculus for Business and Social Science (3) or 229 Calculus I (4 hrs) and MATH 230 – Calculus II (4)
- Statistics 301 (3)

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 Certification Advisor.

GENERAL EDUCATION COURSES MUST INCLUDE:

- Oral (3 hrs)
- Written Communication (6 hrs)
- Psychology (3)

Professional Education

Professional education courses are usually taken during a student’s last four semesters before certification.

- ILAS 201 Introductory Clinical Experience (1 hr)
- ILAS 301 Second Clinical Experience (2 hr)
- ENVS 401 Clinical High School Experience in Environmental Science (2 hrs)
- ENVS 483 Interdisciplinary Teaching of Science in Secondary Education (3 hrs)
- ENVS 495 Methods in Teaching Environmental Science (3 hrs)
- ENVS 475 The Nature of Science across Time and Cultures (2 hrs)
- ENVS 487 Student Teaching (10 hrs)
- ENVS 482 Transition to Professional Science Teaching (2 hrs)
- ETT 402 Use of Technology in Teaching (3 hrs)
- LTIC 420: Methods and Materials for Teaching English to Speakers of Other Languages in Content Areas (3)

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

Educational Theory Courses:

- EPS 406/508 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.

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<th>Fall</th>
<th>Spring</th>
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<tr>
<td>Semester 1</td>
<td>Semester 2</td>
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<td>ILAS 201 (1)</td>
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<td>TLSE 457 (3)</td>
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