Program Overview

The NIU Environmental Science licensure program prepares you to teach ecology, environmental science, and other related science courses in grades 9-12 at any level (honors, accelerated, AP). You will also be qualified to teach introductory level biology, chemistry, earth and space, and physics classes.

The program consists of 36 credits in science teaching methodology, clinicals, and professional education courses taken over four semesters.

Undergraduates or transfer students wanting to earn a professional educator license with an endorsement in environmental science must be enrolled in NIU and working toward an Environmental Studies bachelor’s degree with an emphasis in educator licensure (emphasis six). Typically, undergraduate students complete the licensure program during their last two years at NIU concurrently with their upper level content classes.

If you have already earned a B.S. in Environmental Science or related discipline you should contact program advisors to help determine which specific course requirements are satisfied by your degree.

This document outlines program requirements, how to apply, and the courses needed to earn your Illinois Professional Educator License. For more information, please contact:

Paul Fix, Assistant Director
Secondary Science Educator Licensure
pfix@niu.edu
(815) 753-6819
http://www.niu.edu/elss/
Program Entry Requirements

Before applying to the program, make sure you satisfy these requirements:

- **Degree** - You must be pursuing, or planning on pursuing, an Environmental Science B.S. at NIU or have already earned a B.S. in a related discipline. Previously earned degrees do not have to be from NIU.

- **Grade Point Average** - Cumulative GPA of at least 2.5 if you are an Undergraduate or 3.0 if you are a Graduate student. GPA in all science and math courses must also be at least 2.7.

How to Apply

New cohorts are accepted in the spring and begin their coursework in the fall semester each year. Applications must be submitted in electronic format from Jan 1st to March 1st of the spring semester prior to beginning in the fall. Applications submitted after March 1st may be considered based on clinical placement availability. All application materials can be found at http://www.niu.edu/elss/how-to-apply. Contact program advisors if you have any questions after visiting the website.

Program Completion Requirements

In order to earn your PEL with an endorsement in environmental science, the following tests, checks, and coursework must be completed while in the program.


  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 6 on the Writing portion, OR Composite **SAT** score of 1110 or higher (critical reading and writing) AND minimum score of 26 on writing and language portion ([https://www.isbe.net/Documents/act-sat-testing-in-lieu-of-tap.pdf](https://www.isbe.net/Documents/act-sat-testing-in-lieu-of-tap.pdf)).

- **100 Hours of Observations** – During your clinical placements, you will be completing a minimum of 100 hours of observations in at least three different high school classrooms around the Northern Illinois region.

- **ILTS Subject Matter Test** - You must successfully pass the ILTS Environmental Science content test (112) prior to student teaching. More information can be found at [http://www.il.nesinc.com/](http://www.il.nesinc.com/)

- **edTPA (Teacher Performance Assessment)** - You must successfully pass the edTPA during student teaching in order to receive an Illinois teaching license.

- **Criminal Background Checks** – Many area schools where you will be completing your clinicals require a criminal background check. Details on how to complete this will be provided to you in the clinical classes.

- **Health Checks** - All candidates must take and pass a TB test prior to their third semester in the program. TB tests are available for free to NIU students at the NIU Health Center and are good for one year.

- **Required Coursework** – All courses listed below must be completed in order to earn your license. Transfer students new to NIU should contact program advisors before applying to the program to determine which courses have been satisfied by prior coursework.

  Students must pass all coursework listed with a grade of C- or better. All coursework with a D or F must be repeated in order to successfully complete the program.
**Required Environmental Science Content Coursework**

Students must pass all coursework with a grade of C or better. The hours must include courses in the following required areas:

**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/GEOL409X - 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, Fundamentals of Biology 1 (3) + BIOS 210 Lab (1)
- BIOS 209, Fundamentals of Biology 2 (3) + BIOS 211 Lab (1)

**REQUIRED CHEMISTRY COURSES: 8 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)

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

**REQUIRED MATH COURSES: 6-11 hrs total**
- Math 211 Calculus for Business and Social Science (3) OR 229 Calculus I (4) and MATH 230 – Calculus II(4)
- Statistics 301 (3)

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

**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)
Environmental Science Licensure Courses

Licensure courses are usually taken during a student's last four semesters before graduation (36 cr. total) and all courses must be completed with a C- or better. Only 7-9 credits of education courses will be taken per semester allowing undergraduates to take upper level content courses concurrently. However, during the final semester in the program, student teaching will occupy your entire schedule.

The schedule of courses in professional education usually look as follows:

### First Semester (Fall only)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ILAS 201</td>
<td>Introductory Clinical Experience (30 hours observation; 1 cr)</td>
<td>3</td>
</tr>
<tr>
<td>ETT 402</td>
<td>Use of Technology in Teaching (3 cr)</td>
<td>3</td>
</tr>
<tr>
<td>EPS 406</td>
<td>Human Development and Learning, Middle School and High School (3 cr)</td>
<td>3</td>
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<tr>
<td>ENVS 475</td>
<td>Nature of Science (2 cr)</td>
<td>2</td>
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### Second Semester (Spring only)

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ILAS 301</td>
<td>Second Clinical Experience (30 hours observation; 1 cr)</td>
<td>3</td>
</tr>
<tr>
<td>LTIC 420</td>
<td>Methods and Materials for Teaching English to Speakers of Other Languages (3 cr)</td>
<td>3</td>
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<tr>
<td>ENVS 483</td>
<td>Interdisciplinary Teaching of Science in Secondary Education (3 cr)</td>
<td>3</td>
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### Third Semester (Fall only)

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<tr>
<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>ENVS 401</td>
<td>Pre-student teaching clinical (40+ hours obs; 2 cr)</td>
<td>2</td>
</tr>
<tr>
<td>ENVS 495</td>
<td>Methods in Teaching Environmental Science (3 cr)</td>
<td>3</td>
</tr>
<tr>
<td>SESE 457</td>
<td>Integrating Exceptional Students in the Regular Classroom (3 cr)</td>
<td>3</td>
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### Fourth Semester (Spring only)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENVS 487</td>
<td>Student Teaching (10 cr)</td>
<td>10</td>
</tr>
<tr>
<td>ENVS 482</td>
<td>Transition to Professional Teaching (2 cr)</td>
<td>2</td>
</tr>
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Contact Information

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NIU Secondary Science Licensure Program is professionally accredited through: