Science Education, B.A.

Requirements

The Bachelor of Arts with major in science education requires a minimum of 120 s.h., including a minimum of 44 s.h. in science education professional education courses, completion of an approved College of Liberal Arts and Sciences science degree, and science education content courses. Students must maintain a g.p.a. of at least 2.70 in professional education course requirements. They also must complete the GE CLAS Core. The major requires admission to the Teacher Education Program (TEP). Application information can be obtained through the Office of Student Services.

Students must complete 44 s.h. from the following.

Requirements

Professional Education Courses

Students complete 44 s.h. from the following.

Foundation Courses

Foundation courses may be completed before or after admission to the major.

Additional Licensure Courses

Additional information about options for student teaching and application procedures is available from the Office of Student Services. Applications for student teaching must be submitted during the calendar year before the student teaching semester. The deadline for student planning to student teach the following fall semester is November 15 and April 15 for the following spring semester.

The B.A. with a major in science education requires the following work.

Professional Education Course Requirements

Students complete 44 s.h. from the following.

Foundation Courses

Foundation courses may be completed before or after admission to the major.

Additional Licensure Courses

Student Teaching

Transfer students should consult their adviser since they must complete certain courses before they student teach.

Mathematics Course

Students must complete a college-level math course. Most students complete this course as a part of their GE CLAS Core requirement in Quantitative or Formal Reasoning. For questions about how the math course can be applied to the licensure requirement, see Academic Advising on the College of Education website.

Code
Title
Hours
EDTL:4900 Foundations of Special Education
3
EPLS:3000 Foundations of Education
3
PSQF:1075 Educational Psychology and Measurement
3

Code
Title
Hours
EDTL:3002 Technology in the Classroom
2
EDTL:3091 Secondary Education Program Orientation and Classroom Management
3
EDTL:3095 Teaching Reading in Secondary Content Areas
1
EPLS:4180 Human Relations for the Classroom Teacher
3
EDTL:4751 Science Methods I: Early Learners with Field Experience
3
EDTL:4752 Science Methods II: Junior High with Field Experience
3
EDTL:4753 Science Methods III: High School with Field Experience
3
EDTL:4779 Secondary School Science Practicum
2
EDTL:4087 Seminar: Curriculum and Student Teaching
3
EDTL:4091 Observation and Laboratory Practice in the Secondary School
6
EDTL:4092 Observation and Laboratory Practice in the Secondary School
6

Code
Title
Hours
One of these:
CS:1110 Introduction to Computer Science
3
CS:1210 Computer Science I: Fundamentals
4
STAT:1010 Statistics and Society
3
STAT:1020/PSQF:1020 Elementary Statistics and Inference
3
**Science Education Content Courses**

Students select science courses that relate to their major field of study. In addition, students complete the Broad Science Field Block below:

**Broad Field Science Block**

Students must complete 12 s.h. from the following.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIED:4135</td>
<td>The Nature of Science</td>
<td>4</td>
</tr>
<tr>
<td>At least two of these:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIED:4102</td>
<td>Societal and Educational Applications of Earth Science and Environmental Sciences</td>
<td>4</td>
</tr>
<tr>
<td>SIED:4103</td>
<td>Societal and Educational Applications of Biological Sciences</td>
<td>4</td>
</tr>
<tr>
<td>SIED:4105</td>
<td>Societal and Educational Applications of Physical Sciences</td>
<td>4</td>
</tr>
<tr>
<td>SIED:4106</td>
<td>Societal and Educational Applications of Chemical Concepts</td>
<td>4</td>
</tr>
</tbody>
</table>

**Academic Plans**

**Sample Plan of Study**

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

**Science Education, B.A.**

**Course Title Hours**

**Academic Career**

**Any Semester**

Admission to the Teacher Education Program, College of Education, is by competitive application. For information about application requirements, process, and deadlines, please see the College of Education's website.

Students must maintain a GPA of at least 2.70 in professional education course requirements.

Students must earn another major at the University of Iowa in order to earn the BA in science education. Both degrees may be earned at the same time.

Graduates who have earned one of these degrees at another institution and wish to earn the BA in science education should consult the Department of Teaching and Learning; additional coursework may be required.

Choose a course for the GE CLAS Core Quantitative or Formal Reasoning requirement that will satisfy the Teacher Education Program math requirement.

**First Year**

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSQF:1075</td>
<td>Educational Psychology and Measurement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Year**

**Any Semester**

Exam: PRAXIS core exam

10-hour pre-admission school field experience

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPLS:3000</td>
<td>Foundations of Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Prepare materials for Teacher Education Program application (e.g. essays, letters of recommendation)

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTL:4900</td>
<td>Foundations of Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Admission Application: apply to the Teacher Education Program

**Third Year**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTL:3091</td>
<td>Secondary Education Program Orientation and Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>EDTL:3095</td>
<td>Teaching Reading in Secondary Content Areas</td>
<td>1</td>
</tr>
<tr>
<td>EDTL:3002</td>
<td>Technology in the Classroom</td>
<td>2</td>
</tr>
<tr>
<td>EDTL:4751</td>
<td>Science Methods I: Early Learners with Field Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTL:4752</td>
<td>Science Methods II: Junior High with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>EPLS:4180</td>
<td>Human Relations for the Classroom Teacher</td>
<td>3</td>
</tr>
</tbody>
</table>

Apply for student teaching (see the College of Education website for application instructions and deadlines)

**Fourth Year**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTL:4753</td>
<td>Science Methods III: High School with Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>EDTL:4779</td>
<td>Secondary School Science Practicum</td>
<td>2</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTL:4087</td>
<td>Seminar: Curriculum and Student Teaching</td>
<td>3</td>
</tr>
<tr>
<td>EDTL:4091</td>
<td>Observation and Laboratory Practice in the Secondary School</td>
<td>6</td>
</tr>
<tr>
<td>EDTL:4092</td>
<td>Observation and Laboratory Practice in the Secondary School</td>
<td>6</td>
</tr>
<tr>
<td>Exam: edTPA</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Hours**

44
a These majors include a BA in biology, a BS in biology, a BA in chemistry, a BS in chemistry, a BA in environmental sciences, a BS in environmental sciences, a BA in geoscience, a BS in geoscience, a BA in physics, a BS in physics, or a BS in science studies.

b Complete the College of Education verification of 10 hour field experience form available on the Office of Educational Services web page.

c Please see the College of Education website for detailed application instructions and deadlines. Admission is selective and a priority deadline exists.

d Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.

e Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.

f As a requirement for completion of an approved Teacher Education Program for initial teaching licensure, the state of Iowa requires a passing score on this exam. The test is required before recommendation for licensure or certification to any state.