Science, B.S.

Begin Campus: Altoona

End Campus: Altoona

Program Description

The Science major is designed primarily to provide for the basic educational needs of students who want to pursue professional programs in various scientific or medical fields. The program provides a fundamental group of science courses of value to those who seek positions in government or industry where such knowledge is necessary or desirable. The program offers sufficient flexibility to meet diverse academic and career goals.

Graduates of the program may qualify for admission to the baccalaureate degrees in science. Students planning on continuing in baccalaureate degrees are encouraged to work closely with their advisers.

What is Science?

Science is the study of scientific theory and practice with a strong foundation in the basic sciences (biology, chemistry, mathematics, and physics).

You Might Like This Program If...

• You want to pursue a profession in various scientific and medical fields.
• You seek positions in government or industry where such fundamental science knowledge is necessary or desirable.
• You want to pursue a more advanced degree in science

More Information (http://altoona.psu.edu/academics/associate-degrees/science)

Entrance to Major

Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

Degree Requirements

For the Associate in Science degree in Science, a minimum of 67 credits is required:

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<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>General Education</td>
<td>21</td>
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<tr>
<td>Requirements for the Major</td>
<td>61</td>
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General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (http://bulletins.psu.edu/undergraduate/general-education/associate-degree-general-education-program) section of the Bulletin and consult your academic adviser.

Foundations (grade of C or better is required.)

• Quantification (GQ): 3 credits

• Writing and Speaking (GWS): 3 credits

Knowledge Domains

• Arts (GA): 3 credits
• Humanities (GH): 3 credits
• Social and Behavioral Sciences (GS): 3 credits
• Natural Sciences (GN): 3 credits

Foundations or Knowledge Domains

• A General Education course selected from GWS, GQ, GN, GA, GH, or GS, and may include Integrative Studies (Inter-domain or Linked) courses: 3 credits

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

15 of these 21 credits are included in the Requirements for the Major.

University Degree Requirements

Cultures Requirement

3 credits of United States (US) or International (IL) cultures coursework are required and may satisfy other requirements

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 60 degree credits must be earned for a associates degree. The requirements for some programs may exceed 60 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.

Requirements for the Major

This includes 15 credits of General Education courses: 3 credits of GN courses; 3 credits of GQ courses; 3 credits of GWS courses; 3 credits of GH courses; 3 credits of GQ, GWS, GH, or GN courses.

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 110</td>
<td>Biology: Basic Concepts and Biodiversity</td>
<td>4</td>
</tr>
<tr>
<td>CAS 100</td>
<td>Effective Speech</td>
<td>3</td>
</tr>
</tbody>
</table>
CHEM 110 Chemical Principles I 3
CHEM 111 Experimental Chemistry I 1
ENGL 15 Rhetoric and Composition 3

Additional Courses
CHEM 112 Chemical Principles II 3
or CHEM 202 Fundamentals of Organic Chemistry I

Select one of the following:
MATH 22 College Algebra II and Analytic Geometry 4-6
&MATH 26 and Plane Trigonometry
MATH 40 Algebra, Trigonometry, and Analytic Geometry
MATH 140 Calculus With Analytic Geometry I 1

Select one of the following:
STAT 200 Elementary Statistics
STAT 250 Introduction to Biostatistics

Select one of the following:
PHIL 2 Philosophy, Politics, and Social Theory 3
PHIL 103 Introduction to Ethics
PHIL 110 Introduction to Philosophy of Science
PHIL 118 Introduction to Environmental Philosophy
PHIL 221 Philosophy of Science

Select one of the following:
CMPSC 100 Computer Fundamentals and Applications
CMPSC 101 Introduction to C++ Programming
MIS 103 Microcomputer Applications in Business

Select one of the following:
PHYS 150 Technical Physics I 6-8
& PHYS 151 and Technical Physics II
PHYS 250 Introductory Physics I
& PHYS 251 and Introductory Physics II 1

Supporting Courses and Related Areas
Select 20-25 credits from approved departmental list of BIOLOGICAL/MATH/PHYSICAL SCIENCES

1 PHYS 250 and PHYS 251 and MATH 140 are recommended for students planning to continue in baccalaureate programs of science.

Academic Advising
The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information need to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy)

Altoona
Edward Levri
Associate Professor of Biology