

## Bachelor of Science in Natural Sciences

Natural sciences is a liberal arts major with a focus on courses from three natural sciences departments. You customize this major to meet your interests and personal or career goals. Choose from a variety of courses with a concentration in three areas, such as anthropology, biological sciences, chemistry, computer science, geology and planetary science, history and philosophy of science, mathematics, neuroscience, physics, psychology, and statistics.

**A minimum total of 120 credits (approximately 40 courses) is required for a Bachelor of Science degree with a major in natural sciences.** Of this total, students must take a minimum of 36 credits (approximately 12 courses) according to the specifications at right. The remaining credits required for the degree are outlined on the Requirements for the Bachelor's Degree information sheet.

### Pre-Education Option

The College of General Studies and the School of Education have collaborated on a concentration in the natural sciences major that incorporates the science prerequisite course work needed for admission into the certificate programs in earth and space science and general science. These options may be used by students interested in the professional year or the Master of Arts in teaching programs offered in the School of Education. Completion of the prerequisites for the School of Education does not guarantee acceptance to their programs. See specific requirements on the back page.

### Pre-Medicine Option

This natural sciences concentration incorporates the course work needed for admission to most medical and dental programs. Completion does not guarantee acceptance into graduate study. See specific requirements on the back page.

### Natural Sciences: Standard Major

Choose a minimum of 36 credits (approximately 12 courses) from any three departments below. All courses taken must be related to natural sciences.

1. At least five courses must be taken from one department, and at least three courses each should be taken from two other departments.
2. All courses selected for the natural sciences major must be approved by an academic advisor.

**Anthropology** (natural sciences-related course)

**Astronomy**

**Biological Sciences**

**Chemistry**

**Computer Science** (only courses numbered 0401 and above)

**Geology and Planetary Science**

**History and Philosophy of Science**

**Mathematics** (only courses numbered 0220 and above)

**Neuroscience**

**Physics**

**Psychology** (natural sciences-related course)

**Statistics**

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## Pre-Education Options

### Earth and Space Science Concentration (43–46 credits)

ASTRON	0089	Stars, Galaxies, and the Cosmos (or equivalent)	3 cr.
CHEM	0110	General Chemistry 1 and Lab	4 cr.
CHEM	0120	General Chemistry 2 and Lab	4 cr.
GEOL	0040	Physical Geology	3 cr.
GEOL	0055	Geology Laboratory	2 cr.
GEOL	0890	Oceanography	3 cr.
GEOL	1000-level	Upper-Level Geology Elective	3 cr.
GEOL	1000-level	Upper-Level Geology Elective	3 cr.
MATH	0220	Analytical Geometry and Calculus 1	4 cr.
PHYS	0110	Introduction to Physics 1	3 cr.
PHYS	0111	Introduction to Physics 2	3 cr.
PHYS	0212	Introduction to Laboratory Physics	2 cr.

### General Science Concentration (41 credits)

ASTRON	0089	Stars, Galaxies, and the Cosmos (or equivalent)	3 cr.
BIOSC	0150	Foundations in Biology 1	3 cr.
BIOSC	0050	Foundations in Biology 1 Lab	1 cr.
BIOSC	0160	Foundations in Biology 2	3 cr.
BIOSC	0060	Foundations in Biology 2 Lab	1 cr.
BIOSC	0370	Ecology	3 cr.
BIOSC	1000	Biochemistry	3 cr.
CHEM	0110	General Chemistry 1 and Lab	4 cr.
CHEM	0120	General Chemistry 2 and Lab	4 cr.
CHEM	0310	Organic Chemistry	3 cr.
GEOL	0800	Geology	3 cr.
MATH	0220	Analytical Geometry and Calculus 1	4 cr.
PHYS	0110	Introduction to Physics 1	3 cr.
PHYS	0111	Introduction to Physics 2	3 cr.

## Pre-Medicine Option (39 credits)

BIOSC	0150	Foundations of Biology 1	3 cr.
BIOSC	0050	Foundations of Biology 1 Lab	1 cr.
BIOSC	0160	Foundations of Biology 2	3 cr.
BIOSC	0060	Foundations of Biology 2 Lab	1 cr.
BIOSC	1000	Biochemistry	3 cr.
CHEM	0110	General Chemistry 1 and Lab	4 cr.
CHEM	0120	General Chemistry 2 and Lab	4 cr.
CHEM	0310	Organic Chemistry 1	3 cr.
CHEM	0330	Organic Chemistry 1 Lab	1 cr.
CHEM	0320	Organic Chemistry 2	3 cr.
CHEM	0340	Organic Chemistry 2 Lab	1 cr.
MATH	0220	Analytic Geometry and Calculus 1	4 cr.
PHYS	0110	Introduction to Physics 1	3 cr.
PHYS	0111	Introduction to Physics 2	3 cr.
PHYS	0212	Introduction to Laboratory Physics	2 cr.

### Additional recommended courses for this option:

BIOSC	1850	Microbiology	3 cr.
MATH	0230	Analytic Geometry and Calculus 2	4 cr.
NROSCI	1000	Introduction to Neuroscience	3 cr.
NROSCI	1070	Human Physiology	4 cr.

## College of General Studies

The College of General Studies (CGS) provides adult and continuing education programs that are designed to address changing employer and student needs. The high-quality, flexible programs include courses, certificates, and degrees. CGS provides a single point of access to the University's innovative programs and services that both enrich lives and promote the economic health of the region.

***Requirements subject to change. Check with an academic advisor before registering.***

***An internship program is available through the College of General Studies. Please see your advisor for additional information.***

For more information, contact:

**University of Pittsburgh  
College of General Studies  
412-624-6600  
[www.cgs.pitt.edu](http://www.cgs.pitt.edu)**