



Bachelor of Science

# Natural & Applied Sciences • CIP code 300101

120 credits

## Program Description

The Natural and Applied Sciences program provides students with applicable training across scientific disciplines, enabling them to integrate scientific thought and analysis throughout their course of study. The degree is composed of courses and laboratories in four major scientific disciplines: life sciences, mathematics, physical sciences, and engineering and technology. The integration of these classical areas of science encourages students to broaden their approach to analysis and scholarship, and to develop a creative perspective in the pursuit of scientific learning and practice.

## Program Outcomes

- General education in the life sciences, chemistry, physics, mathematics, and applied sciences.
- Demonstrated understanding of fundamental concepts of scientific thought, data-based reasoning, statistical inference, scientific method, logic, and critical thinking.
- Analysis and application of knowledge of biological systems, life sciences concepts and laboratory procedures, human anatomy and physiology.
- Understanding and creative approaches to the application of mathematical concepts including statistics, statistical inference, probability, and data-based reasoning.
- Understanding and evaluation of the general concepts and procedures within the physical sciences, including: fundamentals of geology and geologic systems, general astronomy, college-level chemistry and physics.
- Analysis and creative approaches to general engineering, technology trends, and the application of scientific principles to research and product development.

## Careers and Further Study

Competencies across scientific disciplines provide graduates with the fundamental academic training and analytical skills to work in a variety of science-related fields such as biotechnology, biological research, information technology, health sciences, and environmental science. Graduates will have a strong foundation to support graduate studies within the life sciences and other scientific fields.

**Degree completion:** General education requirements may be satisfied by an associate's degree or 60 credits of prior courses that meet all general criteria for transfer; up to 90 credits may be accepted.

## General Education ..... 42 credits

LRN175	Principles & Processes of Adult Learning	3
WRT101	College Writing I	3
CTH225	Foundations of Critical Thinking	3
MAT101	College Math I	3
CMP130	Introduction to Computer Applications	3
CMP230	Information Literacy	3
WRT102	College Writing II	3
MAT102	College Math II	3

WRT101-102 and MAT101-102 may be waived if equivalent courses have been accepted in transfer. Credits will be replaced with open electives. WRT201 required if both WRT101-102 are waived; not required for students completing WRT101-102 at Cambridge. WRT090 and MAT100 required if assessment indicates need.

<b>Arts &amp; Humanities</b>	6
<b>Natural &amp; Physical Sciences</b>	6
<b>Social Sciences</b>	6

## Open Electives ..... 33 credits

Choose electives and/or concentrations to support your academic interests and professional goals.

## Natural & Applied Sciences Major ..... 45 credits

SCI203	General Biology I — with lab	4
SCI204	General Biology II — with lab	4
SCI205	Anatomy & Physiology I — with lab	4
SCI207	Microbiology — with lab	4
SCI223	Physics I: Classical Mechanics — with lab	4
SCI201	General Chemistry I — with lab	4
SCI300	Principles of Ecology	3
SCI138	Physical Geology	3
SCI224	Fundamentals of Astronomy	3
MAT201	Introduction to Statistics	3
(new)	Mathematical Thought	3
SCI308	Principles of Engineering	3
SCI303	History of Technological Innovation	3