## undergraduate program

## Chemistry

63-65 credits Bachelor of Science

A Bachelor of Science in Chemistry is an immensely versatile degree for PittGreensburg students who wish to pursue careers in industry, business, communications, government, agricultural and food science, materials science, clinical science, and environmental science.

The degree also can lead to opportunities for graduate study in the health-related professions, particularly in the medical and dental fields, and opportunities for graduate study in chemistry, chemical engineering, biology, and other sciences.

## Employment:

* Government agencies including the National Aeronautics and Space
Administration
* Federal, state and local government such as the Centers for Disease Control
* Manufacturing firms including textile, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drug, and chemical industries
* Environmental organizations
* Water processing plants
* College and universities




## Basic Courses in Chemistry 14 courses - $\mathbf{3 4}$ credits

CHEM 0110
CHEM 0120
CHEM 0250
CHEM 0260
CHEM 0310
CHEM 0320
CHEM 0330
CHEM 0340
CHEM 1130
CHEM 1250
CHEM 1255
CHEM 1410
CHEM 1420
CHEM 1430

General Chemistry 1
General Chemistry 2
Introduction to Analytical Chemistry
Introduction to Analytical Chemistry Lab
Organic Chemistry 1
Organic Chemistry 2
Organic Chemistry 1 Lab
Organic Chemistry 2 Lab
Inorganic Chemistry
Instrumental Analysis
Instrumental Analysis Lab
Physical Chemistry 1
Physical Chemistry 2
Physical Chemistry Lab

## Basic Mathematics Courses $\mathbf{3}$ courses $\mathbf{- 1 2}$ credits

MATH 0220
MATH 0230
MATH 0240

## Basic Physics Courses

PHYS 0174
PHYS 0175
PHYS 0212

Analytic Geometry and Calculus 1
Analytic Geometry and Calculus 2
Analytic Geometry and Calculus 3

## 3 courses - 10 credits

Basic Physics for Science and Engineering 1 Basic Physics for Science and Engineering 2 Basic Physics Laboratory for Science and Engineering

## Science Elective Courses

1 course-2-4 credits

BIOSC 1000
BIOSC 1810
BIOSC 1820
BIOSC 1825
CHEM 1330
CHEM 1035
CHEM 1275
CHEM 1311
CHEM 1380
CHEM 1461
MATH 0250
MATH 1180
STAT 1000

Biochemistry
Macromolecular Structure and Function
Metabolic Pathways and Regulation
Biochemistry Laboratory
Medicinal Chemistry
Introduction to Environmental Chemistry
Introduction to Chemometrics
Advanced Organic Chemistry
Techniques of Organic Research
Computational Chemistry
Ordinary Differential Equations
Linear Algebra
Applied Statistical Methods

## Additional Requirements

## 2 courses - 5 credits

Chemistry majors take the following sequence of courses to fulfill the capstone requirement:

