

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** 

## undergraduate program

# Chemistry

# 63-65 credits Bachelor of Science

A Bachelor of Science in Chemistry is an immensely versatile degree for Pitt-Greensburg 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



# www.greensburg.pitt.edu



14 courses - 34 credits

#### **Basic Courses in Chemistry**

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

#### Basic Mathematics Courses 3 cours

### 3 courses - 12 credits

Analytic Geometry and Calculus 1

Analytic Geometry and Calculus 2

Analytic Geometry and Calculus 3

MATH 0220 MATH 0230 MATH 0240

#### **Basic Physics Courses**

PHYS 0174 PHYS 0175 PHYS 0212 Basic Physics for Science and Engineering 1 Basic Physics for Science and Engineering 2 Basic Physics Laboratory for Science and Engineering

3 courses - 10 credits

#### **Science Elective Courses**

#### 1 course - 2-4 credits

BIOSC 1000 Biochemistry **BIOSC 1810** Macromolecular Structure and Function **BIOSC 1820** Metabolic Pathways and Regulation **BIOSC 1825 Biochemistry Laboratory CHEM 1330** Medicinal Chemistry Introduction to Environmental Chemistry **CHEM 1035 CHEM 1275** Introduction to Chemometrics **CHEM 1311** Advanced Organic Chemistry **CHEM 1380 Techniques of Organic Research** CHEM 1461 **Computational Chemistry** MATH 0250 **Ordinary Differential Equations** Linear Algebra MATH 1180 **Applied Statistical Methods** STAT 1000

#### **Additional Requirements**

#### 2 courses - 5 credits

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

CHEM 1702 CHEM 1710 Undergraduate Research Writing (Spring of Junior Year) Undergraduate Research (Fall of Senior Year)