## **CHEMISTRY, B.S. (BEHREND)**

Begin Campus: Any Penn State Campus

End Campus: Erie

## **Program Learning Objectives**

- **Chemical Literature:** The student will acquire a foundation of chemistry of sufficient breadth and depth to enable them to critically interpret the primary chemical literature.
- **Collaboration:** The student will develop and ability to function effectively on a team, whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- **Communication:** The student will develop the ability to effectively communicate scientific information and research results in written and oral formats with a diverse range of audiences.
- Ethics: The student will develop an ability to recognize ethical and professional responsibilities in scientific situations and make informed judgements, which must consider the impact of chemical processes in global, economic, environmental, and societal contexts.
- Experiment Design: The student will learn the laboratory skills needed to design, safely conduct and interpret chemical experiments and will learn proper ways of disposing of chemical waste.
- Integrate Knowledge: The student will understand the interdisciplinary nature of chemistry and will develop an ability to integrate knowledge of mathematics, physics and other disciplines to a wide variety of chemical and environmental problems.
- **Periodic Table:** The student will understand the importance of the Periodic Table of the Elements, how it came to be, and its role in organizing chemical information, and its relationship to the natural world and natural resources.