

B.S. – Chemistry (American Chemical Society certified degree)

Chemistry is a field that has historically enjoyed very strong career possibilities. Many students are employed directly after their undergraduate education by the chemical, pharmaceutical or related industries, in jobs that have excellent career prospects. Graduate school in chemistry or biochemistry usually includes very generous financial support, and can lead to outstanding career paths in industry, government or academic areas. These opportunities are available to students completing any of the degree programs offered by the IUP Department of Chemistry, and graduates of these programs have gone on to industrial leadership positions, and some of the most prestigious graduate programs in the country.

Program-Level Student Learning Outcomes: B.S. – Chemistry

- You will be prepared for employment in the chemical industry, in government, or entry into graduate or professional school.
- You will also be well trained to use many kinds of chemical analysis, which will give you the opportunity to find employment in several areas, such as environmental or quality control labs.
- You will be able to analyze data and make scientific arguments to apply, analyze and synthesize information from multiple sub-disciplines within chemistry.
- You will be able to solve complex, multi-step problems, using problem-solving strategies learned in the classroom and in the lab.
- You will have acquired effective and safe chemistry laboratory skills, and be able to use the methods and instrumentation of modern chemistry.
- By the time you graduate, you will be able to evaluate novel results, self-direct your activities and apply your knowledge and skills in or out of the laboratory.

The BS degree in Chemistry is designed for a student intending a career in chemistry and is certified by the American Chemical Society. The advanced courses and strong laboratory component in this degree program gives the student excellent preparation for the challenges of employment or graduate school. An important feature of this undergraduate program is that chemical research is a requirement. Laboratory research will be done under the direct supervision of a faculty member, and the student will report on the results of the research in both written and oral formats.