



## CHEMISTRY | COLLEGE OF ARTS AND SCIENCES

### B.A. / B.S. IN CHEMISTRY

Chemistry is the study of matter, its structure, composition, properties, and reactions.

A Bachelor of Arts or Bachelor of Science in Chemistry degree provides students with a rigorous general background in the study of physical sciences to prepare them for science-related jobs requiring a bachelor's degree or graduate or professional school. The requirement of physics, mathematics and biology maximizes the student's future opportunities and provides a comprehensive background in fundamental chemistry and the physical sciences. The program prepares students for professional or research-oriented careers and graduate work in a selected area of chemistry.

Students who major in chemistry can concentrate their study in:

- Pre-professional Study
- Medicine
- Dentistry
- Pharmacy
- Organic/Inorganic/Physical Chemistry

### DEGREE REQUIREMENTS

Completion of a B.S. or B.A. in chemistry requires a total of 120 credit hours, including 34-36 hours of chemistry courses and labs for the B.A. degree and 46 for the B.S. A minimum 2.0 grade point average is required.

### COURSEWORK

- General Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Physical Chemistry
- Biochemistry
- Instrumentation and Analytical Chemistry
- Research Seminar - Students are expected to participate in research during their junior and/or senior year.

In addition, students are required to take physics, mathematics, biology as well as general education requirements established by the College of Arts and Sciences.

Students should consult with the department for additional information concerning prerequisites, course content and academic counseling.

### PROGRAM HIGHLIGHTS

The Department of Chemistry collaborates with the IU School of Medicine - Northwest, located on campus, as well as with other research institutions within the greater metropolitan area. Students on a pre-medical academic track have the added advantage of proximity to the IU School of Medicine - Northwest.

The B.S. program is certified by the American Chemical Society.

### WHAT CAN I DO WITH A B.A. / B.S. IN CHEMISTRY?

Many chemistry graduates get jobs within the chemical industry or proceed to graduate or medical school or to other professional schools. Opportunities for travel to research conferences also exist. There are ample opportunities to engage in research with other academic disciplines, including biology, geosciences, physics, psychology, computer information systems, and the IU School of Medicine – Northwest.

The program accommodates students seeking a career in chemistry or physical sciences as well as pre-professional training in the medical sciences (pre-medical, pre-dental, pre-pharmacy and allied health sciences).

### HANDS-ON LEARNING

The training of an undergraduate student is enhanced by experience in the research aspect of the discipline. Thus, students are encouraged to participate in research with faculty mentors. Students have the opportunity to use state-of-the-art instruments for their research. Research can be conducted within several areas, including organic, physical, inorganic, and environmental chemistry. The department offers fully equipped modern teaching and research labs.

### CLUBS AND ACTIVITIES

The department is heavily involved in community outreach, sponsoring several scientific outreach programs including Science Olympiad, Lego League, Science Fair, and Science Olympiad Mini Clinic. The outreach efforts are conducted in collaboration with other departments including biology, geosciences, mathematics, and psychology.

### RELATED DEGREE OPTIONS

- Minor in Chemistry
- Minor in Physics
- B.A./B.S. in Biochemistry (Anticipated start date Fall 2017)

### FOR MORE INFORMATION

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