

# DEPARTMENT OF CHEMISTRY AND PHYSICS

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The Department of Chemistry and Physics offers major programs in both chemistry and physics leading to either a Bachelor of Science or Bachelor of Arts degree. The department also offers minors in both chemistry and physics, supporting coursework for other major programs and pre-professional curricula, and coursework meeting the physical science requirements in the general education component of all bachelor degrees. The department also provides the subject field needed for the preparation of secondary teachers of chemistry and of general science, in coordination with the College of Education and Human Sciences.

There are a number of concentration options for each major program to best suit the needs of a diverse student population.

The **applied chemistry** option of the chemistry major is designed for students who plan to enter the workforce in chemistry or a related field after graduation. It allows students to customize their specialization with a minor in physics, biology, math, criminal justice, or whatever discipline best suits their intended career path.

The **professional health science** option of the chemistry major is designed for students who plan to go on to a health-related professional program after graduation, such as medical, pharmacy, or dental school. It brings together the fundamental courses in chemistry, biology, and physics that these programs require, thus preparing students for the programs as well as their entrance exams. This concentration does not require a minor.

Students who choose one of the **ACS certified** options of the chemistry major will be best prepared to pursue a graduate degree in chemistry or biochemistry. They encompass a thorough study of chemistry, include ancillary courses in math, physics, and biology, as well as an introduction to research. These concentrations do not require minors.

The **Professional Physics** option of the physics major is designed especially for students who anticipate pursuing further studies in physics beyond the bachelor's degree. It is a rigorous program that aims at preparing students to meet the challenges of graduate studies in physics.

The **General Physics** option of the physics major is designed for students who anticipate seeking employment after receiving the bachelor's degree or who intend to pursue graduate studies in a field other than physics. This option provides a more flexible program, which may be tailored to better suit the particular needs and goals of individual students.

The **Geophysics** option of the physics major is designed for students interested in the Earth's dynamic changes. Attention is given to data analysis using programming and scripted languages of geophysicists as students prepare to enter the field or seek graduate degrees.

The **General Science** option of the physics major is a rigorous field of study primarily designed for secondary education majors.

## Majors

- BA/BS Major in Chemistry (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/chemistry-physics/ba-bs-chemistry/>)

- BA/BS Major in Physics (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/chemistry-physics/ba-bs-physics/>)

## Minors

- Chemistry Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/chemistry-physics/minor-chemistry/>)
- Physics Minor (<https://catalog.una.edu/undergraduate/colleges-programs/arts-sciences/school-science-engineering-mathematics/chemistry-physics/minor-physics/>)