PH.D. IN PHYSICS

Students earning a Ph.D. in Physics advance the start-of-the-art in the field through research---experimental, theoretical, and/or computational---in areas such as condensed matter physics, atomic physics, and particle physics. Coursework is offered to ensure that students have an appropriate level of foundational knowledge.

Graduates of this program are well prepared for careers in fundamental and applied physics research, higher education, and a wide range of industries that can take advantage of the technical, communication, and leadership skills our students develop.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (https://catalog.colostate.edu/general-catalog/graduate-bulletin/).

Learning Objectives

Upon successful completion of this program, students will be able to:

1. Articulate the relevant principles of classical mechanics, statistical mechanics, electromagnetism, and quantum mechanics in the context of important model systems and real systems, at the level expected of graduate students.
2. Apply advanced problem-solving skills using analytical and numerical methods as appropriate at the graduate level.
3. Appreciate the current state of knowledge in areas of physics both within and outside their area of specialization.
4. Carry out original research in physics.
5. Use written communication and oral presentation skills to share research results with the scientific community.