

School of Natural Sciences and Mathematics

Bachelor of Science in Physics

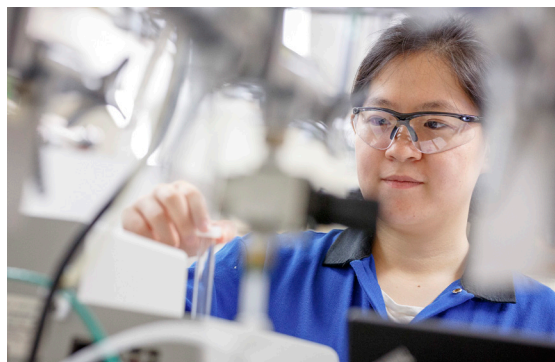


The Department of Physics is one of the original departments of UT Dallas since its beginning in 1961. The department grew from the Southwest Center for Advanced Studies, a research institute started by Texas Instruments (TI) scientists and engineers. Close ties to TI continue to this day as evidenced by the Natural Science and Engineering Research Laboratory, a 192,000-square-foot research facility designed in cooperation with TI.

Our faculty includes world-renowned experts in condensed matter (theory & experiment), space science, cosmology and astrophysics, particle and high-energy physics, nanotechnology, materials science among others. Faculty members are affiliated with and conduct research at physics facilities worldwide.

Career Opportunities

Physics graduates from UT Dallas arrive at graduate school or in the work force prepared to work in the vast array of fields open to modern graduates with a background in physics. Nanotechnology, data science, quantum phenomena, and other contemporary and emerging disciplines are covered throughout the educational process, which ensures that our graduates are ready to excel in highly competitive, sophisticated science environments.



The University's Career Center is an important resource for students pursuing their careers. Licensed counselors are available to provide strategies for mastering job interviews, writing professional cover letters and resumes and connecting with campus recruiters, among other services.

Physics at UT Dallas

Physics students can obtain either a Bachelor of Arts or a Bachelor of Science degree and add a minor in many other disciplines including biology, chemistry, geosciences, mathematics or engineering. A UTeach teacher education program may also be added to the Bachelor of Arts.

High school students need an interest in science and an aptitude for physics, chemistry and mathematics. Entering freshman need a minimum of three and a half years of math, including trigonometry, and three years of science beyond physical science.

Differences between BS and BA degrees:

- The BS degree in physics is the foundation degree for students interested in pursuing further study of physics or a closely related field in graduate school. The degree requires 42 hours from the University's core curriculum, 66 hours in the major, plus electives to total the 120 credit hours needed to graduate.
- Students obtaining the BA degree generally use physics as a background for study in other fields. These may include graduate studies in biotechnology, medicine, geophysics, aerospace, nanoscale technologies, patent law and various aspects of the financial world.

The lower-division course requirements for the BA degree are the same as those for the BS degree. At the upper-division level, 15 hours of advanced physics courses are replaced with 15 hours of science electives.

Marketable Skills

A BS in Physics is generally more rigorous than a BA and also tend to teach more skills, including all of the skills of a BA and potentially:

- Simulation and modeling
- Using specialized equipment
- Programming
- Design and development

Contact Information

Office of Admission and Enrollment

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Dean David Hyndman

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UT Dallas' School of Natural Sciences and Mathematics offers degree programs for undergraduate and graduate students in biology, chemistry, geosciences, mathematics and physics. In addition to regular coursework, undergraduates are encouraged to participate in research alongside the faculty and graduate students. From the world-renowned Alan G. MacDiarmid NanoTech Institute, headed by Dr. Ray Baughman, to the William B. Hanson Center for Space Sciences—where Dr. John Hoffman helped discover water on Mars—the science education at UT Dallas is a hands-on, high quality experience for undergraduates and graduate students alike.

The UTeach Dallas program offers students the opportunity to complete the requirements for high school teacher certification along with their regular BS or BA degrees.

Quick Facts about the School of Natural Sciences and Mathematics

- Established in 1975.
- Six departments.
- More than 3,200 students.
- 29 degrees offered.
- Faculty include a Nobel Prize winner and a member of the National Academy of Engineering.

Degrees Offered

Bachelor of Science: Actuarial science, biochemistry, biology, chemistry, data science, geosciences, mathematics, molecular biology, physics

Bachelor of Arts: Biology, chemistry, mathematics, physics

Master of Science: Actuarial science, bioinformatics and computational biology, biotechnology, chemistry, geosciences, mathematics, molecular and cell biology, physics, statistics

Master of Arts: Teaching in mathematics education, teaching in science education

Doctor of Philosophy: Chemistry, geosciences, mathematics, molecular and cell biology, physics, statistics

Certificates

Postbaccalaureate certificate in biomedical science

Graduate certification in data science

Fast Track to Graduate School

The Fast Track program enables exceptionally gifted UT Dallas students to include master's level courses in their undergraduate degree plans. Students who meet the requirements for admission to graduate school and the minimum GPA requirement for their major can take up to 15 hours of graduate level coursework that can apply toward their undergraduate and graduate level coursework. To take graduate courses in the Fast Track program upper-division undergraduates must have completed 90 semester credit hours and petition their associate dean for permission to take graduate courses.

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