

THE WIESS SCHOOL OF NATURAL SCIENCES

The Wiess School of Natural Sciences advances fundamental understanding of the natural world and improves the human condition through pioneering research, while empowering future generations of discoverers and leaders in a collaborative, diverse, and inclusive community.

In support of that mission, faculty and students in the natural sciences seek answers to profound questions about the underlying structure of the universe and the origin and complexity of life, and they make discoveries that lay the foundations for tomorrow's technological marvels.

Natural Sciences faculty have a legacy of pathbreaking work, such as the Nobel prize-winning discovery of carbon-60 by chemistry professors Robert Curl and Rick Smalley, which launched the field of nanoscience and established Rice as a world-renowned center for research in materials.

Discoveries made by natural sciences graduates have changed the way we view the universe and advanced the quality of life here on Earth: Robert Wilson (class of 1957) shared a Nobel prize for the discovery of the cosmic microwave background, Louis Brus (class of 1965) shared a Nobel prize for the discovery and synthesis of quantum dots, and work by Time Magazine Hero of the Year 2021 Barney Graham (class of 1974) enabled the development of messenger-RNA-based COVID vaccines.

Natural Sciences offers 19 majors and seven minors, allowing undergraduate students to explore their interests in a wide range of courses taught by world-class faculty in our six departments. Even as freshmen, all our students have access to mentored research opportunities with our faculty and partners at the Texas Medical Center. Many of our students present their work at conferences and publish in top research journals before graduation.

At the graduate level, five of our six departments offer research-based degrees that train our students to be experts in their fields. The school also supports a professional science master's program that offers six industry-oriented non-thesis degrees.

Among the 190 natural sciences faculty are six members of the National Academy of Sciences or Engineering and recipients of prestigious Packard Fellowships, Beckman Foundation Fellowships, NSF CAREER Awards for junior faculty, Feynman Prizes, Norman Hackerman awards in Chemistry, the Athelstan Spilhaus Award for Enhancement of the Public Understanding of Earth and Space Science, and the Public Welfare Medal from the National Academy of Science. Faculty and students participate in many interdisciplinary institutes and centers (<https://naturalsciences.rice.edu/research/labs-centers-and-institutes/>) that support collaborative work and provide additional resources for training and scientific inquiry, such as the Rice Advanced Materials Institute, Rice Space Institute, Rice Sustainability Institute, Rice Synthetic Biology Institute, and Rice Water Institute.

Departments and Programs

- [Applied Chemical Sciences](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/applied-chemical-sciences/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/applied-chemical-sciences/>)
- [Applied Physics](https://ga.rice.edu/programs-study/departments-programs/interdisciplinary/applied-physics/) (<https://ga.rice.edu/programs-study/departments-programs/interdisciplinary/applied-physics/>)

- [Bioscience and Health Policy](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/bioscience-health-policy/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/bioscience-health-policy/>)
- [BioSciences](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/biosciences/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/biosciences/>)
- [Chemical Physics](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/chemical-physics/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/chemical-physics/>)
- [Chemistry](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/chemistry/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/chemistry/>)
- [Earth, Environmental and Planetary Sciences](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/earth-environmental-planetary-sciences/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/earth-environmental-planetary-sciences/>)
- [Energy Geoscience](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/energy-geoscience/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/energy-geoscience/>)
- [Energy Transition and Sustainability](https://ga.rice.edu/programs-study/departments-programs/engineering/energy-transition-sustainability/) (<https://ga.rice.edu/programs-study/departments-programs/engineering/energy-transition-sustainability/>)
- [Environmental Analysis](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/environmental-analysis/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/environmental-analysis/>)
- [Environmental Science](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/environmental-science/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/environmental-science/>)
- [Health Sciences](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/health-sciences/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/health-sciences/>)
- [Kinesiology](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/kinesiology/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/kinesiology/>)
- [Mathematics](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/mathematics/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/mathematics/>)
- [Neuroscience](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/neuroscience/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/neuroscience/>)
- [Physics and Astronomy](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/physics-astronomy/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/physics-astronomy/>)
- [Science Teaching](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/science-teaching/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/science-teaching/>)
- [Space Studies](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/space-studies/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/space-studies/>)
- [Sports Medicine and Exercise Physiology](https://ga.rice.edu/programs-study/departments-programs/natural-sciences/sports-medicine-exercise-physiology/) (<https://ga.rice.edu/programs-study/departments-programs/natural-sciences/sports-medicine-exercise-physiology/>)