



BACHELOR OF SCIENCE

# **BIOPHYSICS**



College of Science and Technology

*Biophysics explores interdisciplinary questions such as the following: How are genes turned on and off? How do animals and plants respond to light? How do cells move? How does the nervous system work?*

# **BIOPHYSICS**

## **Bachelor of Science**

### **Program Choices**

The bachelor of science in biophysics is an interdisciplinary program that requires course work in biology, physics, chemistry and mathematics. Students must take four elective courses chosen in consultation with the physics advisor, at least two of which must be physics courses. All courses must be 2000 level or above.

### **Courses include:**

- Biotechnology
- Cell Structure & Function
- Cellular and Molecular Neuroscience
- Comparative Animal Physiology
- Developmental Genetics
- Embryology
- Endocrinology
- Experimental Physics
- Freshwater Ecology
- Human Genetics
- Immunology
- Introduction to Modern Physics
- Invertebrate Biology
- Mammalian Physiology
- Marine Ecology
- Mathematical Physics
- Organogenesis
- Systems Neuroscience
- Thermal Physics
- Tropical Marine Biology
- Virology

### **Career Options**

The program is particularly appropriate for those planning careers in the medical or life-sciences fields and may fulfill all medical and pharmacy school requirements. Biophysics students interested in research careers can pursue a graduate degree in biophysics, biology, molecular biology or neuroscience, as well as combined MD/PhD degrees in medical physics, health physics or nuclear medicine.

### **Research Opportunities**

Real-world, hands-on research means students learn the latest scientific techniques, from the necessary basics to high-tech analysis. The Biology and Physics departments have a strong research program supported by the National Science Foundation and other funders. Students are encouraged to participate in a research project in a faculty lab, either through the college's Undergraduate Research Program (URP) or separately. Students can present their work at the annual URP symposium or potentially have their work published in a scientific journal.

### **Faculty Contacts**

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