ENGINEERING PHYSICS, B.S.

The Department of Engineering Physics offers the B.S. degree in engineering physics. The degree is designed to provide graduates with skills in emerging technological areas. They are well prepared for pursuing advanced graduate degrees and for employment in high-tech startup companies and traditional engineering firms, as well as positions in academia, government, and national laboratories.

Students specialize in one of three technological focus areas: nanoengineering, plasma science and engineering, and scientific computing.

Distinguishing features of the engineering physics degree include a strong emphasis on math, physics, and engineering fundamentals; choice of a technical focus area; and emphasis on research as part of a campus research group or through individually mentored research with a faculty member, culminating in a senior thesis.

THE OBJECTIVES OF THE ENGINEERING PHYSICS PROGRAM ARE TO:

• Educate students to think and participate deeply, creatively, and analytically in emerging areas of engineering technology.
• Educate students in the basics of instrumentation, design of laboratory techniques, measurement, data acquisition, interpretation, and analysis.
• Educate students in the methodology of research.
• Provide and facilitate teamwork and multidisciplinary experiences throughout the curriculum.
• Foster the development of effective oral and written communication skills.
• Expose students to environmental, ethical and contemporary issues.