

Mission Statement

The mission of Engineering Physics at New Mexico State University is to offer an accredited degree that combines high-quality engineering and physics programs to best prepare our graduating students for careers in state-of-the-art industry or to move on to advanced study in engineering or physics.

Educational Objectives

Competitiveness. Graduates are competitive in internationally-recognized academic, government and industrial environments;

Adaptability. Graduates exhibit success in solving complex technical problems in a broad range of disciplines subject to quality engineering processes;

Teamwork and Leadership. Graduates have a proven ability to function as part of and/or lead interdisciplinary teams.

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New Mexico State University



Department of
Physics

**Engineering
Physics
Degree**

KINETIC ENERGY $K = \frac{m}{2} v^2$

WORK - KINETIC ENERGY THEOREM

$$W_{TOT} = \frac{m}{2} v_2^2 - \frac{m}{2} v_1^2 = K_2 - K_1 = \Delta K$$

↑ WORK PERFORMED ON OBJECT ↑ FINAL SPEED ↑ INITIAL SPEED

BE BOLD. Shape the Future.



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New Mexico State University



College of Engineering

ABOUT ENGINEERING PHYSICS

Engineering Physics (EP) at NMSU is the only engineering physics degree program in New Mexico. Offers ABET - accredited BS Degree. The Bachelor of Science in Engineering Physics is for students who want to apply science and math to real-life technical problems. Cooperative education and internship possibilities can give students hands-on work experience, which is important for students who want employment immediately after graduation. The program is offered jointly by the College of Engineering and the Department of Physics (College of Arts & Sciences).

Qualified engineering physicists work as professional engineers and/or physicists in high technology industries, applied mechanics, academia, materials science, quantum physics, nanotechnology, etc. Engineering physicists are flexible professionals who often work in teams with specialists from multiple scientific fields. EP is focused on the cross-functionality between theoretical science and practical engineering while emphasizing research and development, design and analysis.

The Engineering Physics Curriculum

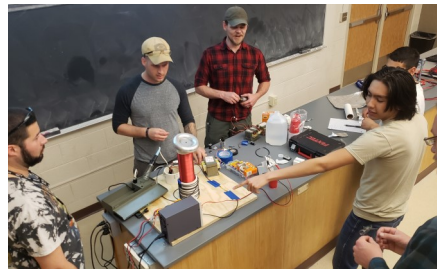
EP is the discipline devoted to creating and optimizing engineering solutions by integrated application and understanding of the fundamentals of physics to engineering principles;

EPAE - Aerospace Engineering

EPChE - Chemical Engineering

EPEE - Electrical Engineering

EPME - Mechanical Engineering



Capstone Design Courses

The EP capstone design courses involve student teams with an outside client, i.e. Boeing, GM, Delphi, Intel and Raytheon, to fabricate a design project during their senior year. The capstone courses run in the Departments of Chemical Engineering, Electrical Engineering and Mechanical & Aerospace Engineering.

Engineering Physics Students

- Follow a rigorous course of study in physics and mathematics, combined with an engineering core curriculum in chemical, mechanical, electrical or aerospace engineering.
- Perform laboratory work and become familiar with experimental techniques and technology.
- Practice working in multidisciplinary environments to learn the highest level of communication skills and teamwork.
- Use their valuable undergraduate training to prepare for professional careers in business administration, law, medicine or engineering.

Society of Engineering Physics Students—SEPh



The Society for Engineering and Physics aims to provide students with hands-on experience applicable to their field of study. Our organization offers support and resources designed to help its members succeed in their chosen academic path. Open to all students, of any major.

Email: seph@nmsu.edu



SEPh's 3D Printers

