

ENGINEERING PHYSICS

Undergraduate Program Information

The Engineering Physics program is offered jointly by the Department of Physics and the College of Engineering. The faculty is drawn from the Departments of Physics, Chemical and Materials Engineering, Electrical and Computer Engineering, and Mechanical & Aerospace Engineering. The mission of the Engineering Physics program 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 physics.

The B.S. in Engineering Physics confers an engineering credential. Students in the program complete an engineering core curriculum, as well as a rigorous course of study in physics and mathematics. A strong laboratory component prepares students in experimental techniques and technology using state-of-the-art equipment. The Engineering Physics program is accredited by the Engineering Accreditation Commission (EAC) of ABET, <https://www.abet.org>, under the General Criteria and the Program Criteria for Engineering, General Engineering, Engineering Physics, Engineering Science, and Similarly Named Engineering Programs. The program has the following educational objectives:

1. **Competitiveness.** Graduates are competitive in internationally recognized academic, government and industrial environments.
2. **Adaptability.** Graduates exhibit success in solving complex technical problems in a broad range of disciplines subject to quality engineering processes.
3. **Collaboration/Teamwork and Leadership.** Graduates have a proven ability to function as part of and/or lead interdisciplinary teams.

The goals of the program are:

1. to give students a strong education in the fundamentals of physics, engineering, applied mathematics and computation;
2. to develop skill in real-world problem solving starting from fundamental physical principles;
3. to improve communication skills; and
4. to develop ability to work in a team.

The student must choose one of four concentrations in

- Aerospace Engineering,
- Chemical Engineering,
- Electrical Engineering, or
- Mechanical Engineering.