c. **Design Abilities:** an ability to design a system, component, or process to meet desired needs with realistic constraints such as economic, environmental, social, political, ethical, health & safety, manufacturability, and sustainability.

d. **Teamwork:** an ability to function on multi-disciplinary teams.

e. **Problem Solving:** an ability to identify, formulate, and solve engineering and physics problems.

f. **Professional Responsibility:** an understanding of professional and ethical responsibility.

g. **Communication Skills:** an ability to communicate effectively.

h. **Societal Impact:** the broad education necessary to understand the impact of engineering and physics solutions in a global, economic, environmental, and societal context.

i. **Life-long Learning:** a recognition of the need for and an ability to engage in life-long learning.

j. **Contemporary Issues:** a knowledge of contemporary issues.

k. **Technical Know-How:** an ability to use the techniques, skills, and modern engineering tools necessary for engineering physics practice.

Contact Information:

Physics ABET Internal Committee

Name	E-mail	Phone	
Elena Fernandez	abraxcat@nmsu.edu	6-5584	Design & Outreach
Tom Hearn	thearn@nmsu.edu	6-3831	Department Head
Gary Kyle	kyle@nmsu.edu	6-1790	Committee Chair
Heinz Nakotte	hnakotte@nmsu.edu	6-2459	
Steve Pate	pate@nmsu.edu	6-2135	EP Student Advisor
Chris Pennise	cpennise@nmsu.edu	6-4906	

All information is current as of: 03.08.07

http://engineeringphysics.nmsu.edu

Engineering Physics
Quick Reference Guide

Our Mission:

The mission of Engineering Physics at New Mexico State University is to offer an ABET-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

EP Objective 1: Skills. Develop skills pertinent to problem-solving in physics and engineering, including expertise in design, data collection, analysis and modeling, creative thinking, and effective communication and collaborative-working skills;

EP Objective 2: Career Preparation. Prepare graduates to begin productive careers in industry, governmental laboratories and academic institutions, or to continue to advanced study in either a chosen engineering field or in physics;

EP Objective 3: Professional Adaptation. Enable students to adapt as needs in the profession change;

EP Objective 4: Ethics. Instill in our students an understanding of their professional and ethical responsibilities, grounded in the real life conflicts they will encounter after leaving school.

Program Outcomes:

a. **Scientific Expertise:** an ability to apply knowledge of mathematics, science, and engineering.

b. **Experimental Training:** an ability to design and conduct experiments, as well as to analyze and interpret data.