WSUV SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
EDUCATIONAL OBJECTIVES AND PROGRAM OUTCOMES
ELECTRICAL ENGINEERING

Educational Objectives

The goal of our program is to prepare our graduates for successful professional practice and advanced studies by providing a broad education in electrical engineering and by offering the opportunity to deepen their technical understanding in a particular concentration area of related technical electives.

Our graduates will:

1. Apply technical knowledge and skills as electrical engineers to provide effective solutions in industrial and governmental organizations.
2. Utilize effective communication, team, and project management skills to work productively within their professions and communities.
3. Conduct themselves as responsible professionals contributing to the greater benefit of society through technology.
4. Pursue professional development and/or graduate studies to meet the emerging and evolving demands, and increasing responsibilities of a successful career.

Program Outcomes

Our students will have:

a. Knowledge of mathematics, science, and engineering and the ability to apply this knowledge in solving problems.
b. An ability to design and conduct experiments, as well as to analyze and interpret data.
c. Ability to design and realize electrical and electronic components and systems to meet desired needs within realistic constraints such as economical, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
d. Ability to function on multi-disciplinary teams.
e. Ability to identify, formulate, and solve problems encountered in the practice of electrical engineering.
f. Understanding of professional and ethical responsibility.
g. Ability to communicate effectively.
h. Ability to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
i. Recognition of the need for, and an ability to engage in life-long learning.
j. Knowledge of contemporary issues.
k. Ability to use the techniques, skills, and modern engineering tools necessary for electrical engineering practice.