Electrical and Computer Engineering

Program Educational Objectives

The program educational objectives of the Electrical & Computer Engineering program at AIU are to enable graduates to:

- Apply advanced technical knowledge and engineering principles to develop innovative and effective electrical and computer design solutions.
- Demonstrate ethical responsibility, effective communication skills, and the ability to lead and collaborate within diverse, multidisciplinary teams to address complex engineering and societal challenges.
- Engage in continuous learning and professional growth through graduate studies, certifications, or active involvement in the electrical and computer engineering or related areas to remain current with emerging technologies and evolving global trends.

The Electrical and Computer Engineering Program is designed to provide students with the ability to:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze, and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Electrical engineering is a practical discipline with a plethora of great career opportunities. Electrical and electronics engineers can work in research and development industries, engineering services firms, manufacturing, government, and tech.

