

Url	<a href="https://www.aum.edu.kw/english/academics/undergraduate-programs/bsc-electrical-engineering">https://www.aum.edu.kw/english/academics/undergraduate-programs/bsc-electrical-engineering</a>
Address	29.164056427664836, 48.10094380924202
Departments	<ul style="list-style-type: none"> <li>• Civil Engineering</li> <li>• Industrial Engineering</li> <li>• Computer Engineering</li> <li>• Electrical Engineering</li> <li>• Mechanical Engineering</li> <li>• Chemical Engineering</li> <li>• Architectural Engineering</li> <li>• Information Systems and Technology</li> <li>• Telecommunications and Networking Technology</li> </ul>
Video	<a href="https://youtu.be/uwEpCsgOWXo?si=anex8A8sWlmfILSD">https://youtu.be/uwEpCsgOWXo?si=anex8A8sWlmfILSD</a>

The Electrical Engineering program encompasses a broad range of technical areas, including circuit design and applications, micro and nano-electronics, power system and machines, electromagnetic fields, engineering optics and signal processing. AUM curriculum focuses on these areas and is complemented with well-equipped laboratories, real-world projects, and design experience throughout their education. Graduates from electrical engineering hold many positions in all major industries.

The program at AUM is designed to provide a climate that encourages and promotes intellectual and personal growth, and a desire for life-long learning and development. The curriculum offered by AUM trains students for direct entry into the engineering profession and prepares them for graduate studies.

## Program Educational Objectives

The Electrical Engineering program offers a well-rounded curriculum that focuses on engineering theory and applications. The program embraces AUM's mission through active involvement of students in their learning process. Within few years of graduation, graduates from the electrical engineering program would have shown evidence of:

- Excellence in their professional practice to serve local and international industries, and government sectors within a changing global environment.

- Continuous life-long learning by acquiring new knowledge, mastering emerging technologies, and using appropriate tools and methods.
- Contribution to the overall development of their society and to be recognized as effective, ethical and inspirational members in their organizations.
- Working with teams and communities through collaboration, effective communication, public service, and leadership.

## **Student Outcomes**

The Program of Study follows the ABET student outcomes criteria implemented in alignment with AUM's vision and educational philosophy. Graduates of Electrical Engineering must have demonstrated:

- 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.

## **Career Opportunities**

Graduates from Electrical Engineering are sought by all major industries. Electrical engineers hold many challenging positions in the aerospace, automotive, transportation, petroleum,

chemical, medical, textile and other nonelectrical-oriented industries, as well as in computers, electronics, communications, power, and other electrical industries. Their activities span across:

- Industrial activity
- Research and development
- Design
- Production
- Marketing
- Operation
- Field testing
- Maintenance of many types of equipment for private and public sectors