

Mechatronics Engineering

B.S. Program

The Mechatronics Engineering (B.S.), is accredited by the Engineering Accreditation Commission of [ABET](#), under the commission's General Criteria with no applicable program criteria.

[Academic Program Information](#)

Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) of the Mechatronics Engineering (B.S.) are broad statements describing the expected accomplishments of graduates within a few years after graduation. These objectives are that graduates will:

1. Effectively apply knowledge from their training in Mechatronic Engineering in management and development of proposals of scientific and technological innovation and entrepreneurship, such that they generate value and improve their environment.
2. Act with social responsibility in the development of their community and make decisions with a positive impact, promoting long-term sustainability.
3. Proactively perform in leadership positions in national or international environments working with multidisciplinary and multicultural teams.
4. Stay up to date on trends and technologies in their professional field to adapt to the change and evolution of global challenges.

Student Outcomes (SOs)

By the time of graduation, students of the program will be able to demonstrate:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. 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.
3. An ability to communicate effectively with a range of audiences.
4. 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.
5. 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.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.