

## B.S. IN MECHANICAL ENGINEERING



The Mechanical Engineering Program is accredited by the Engineering Accreditation Commission of **ABET**, <http://www.abet.org>

The number of enrolled students and the number of graduates in the past five years is summarized in the following table:

Year	2018	2019	2020	2021	2022
Enrollment	339	336	312	330	282
Graduates	47	52	46	30	39

### ***Goals of the Mechanical Engineering Program***

Note: Goal 1 represents the Program Educational Objectives as defined by ABET, that is, “broad statements that describe what graduates are expected to achieve within a few years after graduation”. Goals 2 through 5 are not considered within the ABET definition of Program Educational Objectives; these are general goals that convey additional program endeavors.

**1.** (ABET Program Educational Objectives) To provide a thorough education in the fundamentals of mechanical engineering, including thermal, fluid, and mechanical systems, in order to sustain an excellent and accredited undergraduate program with the following expectations for our students, within a few years after graduation:

- to be gainfully employed in mechanical engineering (or related disciplines) or in good academic standing in a program of graduate studies in a variety of fields, including mechanical engineering;
- to be engaged in activities that promote their professional development;
- to participate in organizations that serve their profession.

**2.** To search for, develop, and use the most effective teaching/learning methodologies that deliver graduates with the attitude and ability to apply practical knowledge in the workplace.

**3.** To promote scholarly research activities between students and faculty, and to gradually transition from a teaching, to a teaching-and-research program.

4. To encourage enrichment of the educational experience through participation in student chapters of professional societies, special student projects, and industry internships.
5. To review, assess and improve the program on a continuous basis.

***Outcomes for the Mechanical Engineering Program***

(What students should know and should be able to do by the time of graduation)

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.