

BIOMEDICAL ENGINEERING, B.S.

Program Educational Objectives

Graduates of the Biomedical Engineering Program will:

1. Practice in a professional career or pursue an advanced or professional degree in which they are contributing to scientific, professional, and/or local communities through the improvement of human health.
2. Advance their careers by engaging in teamwork, effective communication, and continued learning to expand their professional development and technical understanding.

Learning Outcomes

- Ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 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.
- Ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
- Ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
- Ability to communicate effectively with a range of audiences.
- 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.
- 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.

Academic Standards

Program GPA

Program GPA requirement policies are described in the College of Engineering and Computing section of this bulletin. For the purpose of these policies, the following courses are used to determine the Program GPA for the Biomedical Engineering B.S. program: all Biomedical Engineering Major courses, all courses used to satisfy a Biomedical Engineering Elective, all courses used to satisfy an Engineering Elective, and ECHE 320 or equivalent.

Minimum Course Grades

The Biomedical Engineering program requires that a grade of "C" or better be earned in each of the following courses: ENGL 101, MATH 141, MATH 142, MATH 241, MATH 242, BIOL 101, BIOL 101L, CHEM 111, CHEM 111L, CHEM 112, CHEM 112L, CHEM 333, CHEM 334, PHYS 211, PHYS 211L, BMEN 212, BMEN 240, BMEN 263, and BMEN 290.