

Program Educational Objectives

The BSNE degree curriculum provides a broad education in the fundamentals and application of nuclear engineering and radiation science. The educational objectives of the Nuclear Engineering program are to produce graduates capable of achieving the following in the future:

1. Identify and excel in wide variety of careers in which the skills, knowledge, and abilities gained in nuclear engineering and the broader engineering fields can be applied.
2. Make significant contributions to global world energy supplies through the nuclear enterprise and other related fields including, but not limited to, medicine, security and space transportation.
3. Apply their skills, abilities, and capability to acquire relevant knowledge to the challenges of the day including, but not limited to, global energy supply, fresh water and medical care.
4. Achieve success in their chosen career or profession as evidenced by career advancement and satisfaction, entrepreneurial activities, professional leadership of national and international activities.
5. Conduct themselves with the highest professional and ethical principles.

ABET Student Outcomes

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of nuclear engineering, science, and mathematics.
2. An ability to apply Nuclear 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.