

# BSME Program Educational Objectives



The program educational objectives (PEOs) support the missions of the university and of the college. The program educational objectives are published in our undergraduate handbook and on the department website at <http://www.ncat.edu/academics/schools-colleges1/coe/meen/>. The PEOs for the Mechanical Engineering Program are as follows:

Within a few years of graduating from the Bachelor of Science in Mechanical Engineering Program, graduates are expected to:

1. Perform effectively in mechanical engineering related positions in industry or in graduate/professional schools.
2. Demonstrate proficiency in teamwork and leadership skills for solving problems.
3. Be active in their professional societies and in their communities.
4. Engage in professional development through lifelong learning.

# BSME Student Outcomes



The Bachelor of Science in Mechanical Engineering program has adopted ABET program outcomes (a) through (k) as a conduit to achieve the Program Educational Objectives. These outcomes reflect the desired attributes of the graduating student of our program. The student outcomes of the program are:

- a) an ability to apply knowledge of mathematics, science, and engineering
- b) an ability to design and conduct experiments, as well as to analyze and interpret data
- c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- d) an ability to function on multi-disciplinary team
- e) an ability to identify, formulate, and solve engineering problems
- f) an understanding of professional and ethical responsibility
- g) an ability to communicate effectively
- h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- i) a recognition of the need for, and an ability to engage in life-long learning
- j) a knowledge of contemporary issues
- k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

# BSME Enrollment and Graduation DATA



## BS Mechanical Engineering Enrollment Data

	2009	2010	2011	2012	2013
Fresh/Sophomore	105	80	89	111	126
Junior/Senior	127	134	119	113	125
TOTAL	232	214	208	224	251

## BS Mechanical Engineering Graduation Data

	2009	2010	2011	2012	2013
TOTAL	39	28	44	38	40