Bachelor of Science in Materials Science and Engineering†
Department of Materials Science and Engineering

Program Educational Objectives

The MSE program’s educational objectives are formulated to imbue in our graduates the foundational values and competencies needed to effectively navigate new challenges and professional contexts that they may face during their career. These objectives are:

1. To attain competency in the fundamentals of mathematics and the principles of physical science and engineering and their application to address new technical challenges,

2. To attain competency in the fundamentals and operational principles of the MSE discipline in solving diverse design problems associated with any class of engineering materials,

3. To value and promote diversity in engineering teams and ethical practices,

4. To value and practice lifelong learning,

5. To appreciate and promote the role of MSE in the greater global context of technology and manufacturing,

6. To identify, evaluate and adopt new information resources, new tools of engineering science, and new modeling and computational methodologies,

7. To provide the foundation for continuous improvement of communication effectiveness.

† Accredited by the Engineering Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 | 410.347.7700.