

Student Learning Outcomes for Academic Programs

A.A.S. in Mechanical Engineering Technology

Catalog Year 2017-18

General Education Outcomes

1. Communicate effectively through written and oral forms
2. Use analytical reasoning to identify issues or problems and evaluate evidence in order to make informed decisions
3. Reason quantitatively as required in various fields of interest and in everyday life
4. Apply information management and digital technology skills useful for academic research and lifelong learning
5. Discipline specific outcomes: A robust general education is founded on the knowledge, concepts, methods and perspectives that students gain through study of the social sciences and history, the natural sciences, the arts and the humanities. These disciplinary studies stimulate intellectual inquiry, global awareness, and cultural and artistic appreciation; they equip students to make informed judgments and engage with life beyond the classroom.
 - a. Apply concepts and perspectives from history or the social sciences to examine the formation of ideas, human behavior, social institutions, or social processes and to make informed judgments
 - b. Apply concepts and methods of the natural and physical sciences to examine natural phenomena and to make informed decisions
 - c. Apply aesthetic and intellectual criteria to examine or create works in the humanities and the arts and to make informed judgments

Program Outcomes

- A. Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities
- B. Apply knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge
- C. Conduct standard tests and measurements, and conduct, analyze, and interpret experiments
- D. Function effectively as a member of a technical team
- E. Identify, analyze, and solve narrowly defined engineering technology problems
- F. Apply written, oral, and graphical communication in both technical and nontechnical environments; and identify and use appropriate technical literature
- G. Understand the need for and demonstrate an ability to engage in self-directed continuing professional development
- H. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity
- I. Demonstrate a commitment to quality, timeliness, and continuous improvement

June 2017