



ARKANSAS TECH  
UNIVERSITY

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## Program Learning Outcomes (ABET Student Outcomes)

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<i>College/School</i>	Engineering & Applied Science
<i>Department</i>	Mechanical Engineering
<i>Program</i>	Bachelor of Science in Mechanical Engineering
<i>Link to Program Home</i>	<a href="https://www.atu.edu/engineering/mechanical/abet.php">https://www.atu.edu/engineering/mechanical/abet.php</a>

*Students graduating from the Mechanical Engineering program per ABET should have:*

- 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 multidisciplinary teams
- 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
- l. An ability to apply advanced mathematics through multivariate calculus and differential equations
- m. An ability to apply principles of engineering, basics science, and mathematics to model, analyze, design, and realize physical systems, components or processes
- n. An ability to work professionally in both thermal and mechanical systems