



MECHANICAL, AEROSPACE & BIOMEDICAL ENGINEERING

2022

OVERVIEW

LEADERSHIP

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OUTSTANDING FACULTY

MABE is proud to have eight endowed faculty members including UT-ORNL Governor's Chairs Suresh Babu and Uday Vaidya. Nine faculty members are NSF CAREER or ONR Young Investigator Program Award winners. MABE faculty are respected, world-class leaders in their fields, and are dedicated to teaching students and aiding them in developing the skills necessary to have successful careers.

Professors	16	Lecturers/Professors of Practice	6
Associate Professors	15	Research Assistant Professors	6
Assistant Professors	13	Research Professors	2
Research Associate Professors	2	Clinical Associate Professors	1
Total		61	

TOTAL ENROLLMENT

Full-Time Academic Year 2022-23

BS	1,549	PhD	138
Mechanical Engineering	804	Mechanical Engineering	89
Aerospace Engineering	381	Aerospace Engineering	29
Biomedical Engineering	364	Biomedical Engineering	19
MS	116	Engineering Science	1
Mechanical Engineering	47	Total	1,803
Aerospace Engineering	50		
Biomedical Engineering	11		
Dual MS-MBA	8		

DEGREES, MINORS & CERTIFICATES

BS, MS, and PhD in Mechanical, Aerospace, and Biomedical Engineering.

Certificates

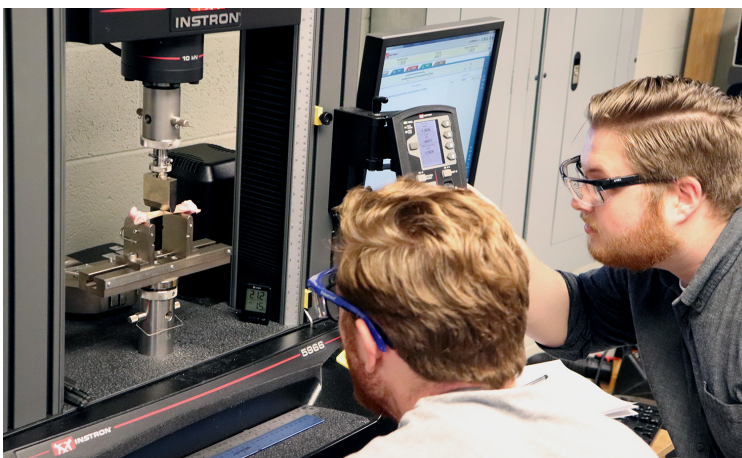
- Advanced Manufacturing Graduate Certificate
- Reliability and Maintainability Engineering

Five-Year BS-MS Program

Qualifying students can take up to nine credit hours of approved graduate courses for their senior undergraduate electives and have them count toward their BS and MS degrees.

Dual MS-MBA Program

An integrated program with the Haslam College of Business that allows students to obtain an MBA with a major in business administration and an MS in mechanical, aerospace, or biomedical engineering.



UT SPACE INSTITUTE

Located in Tullahoma, TN, the Space Institute (UTSI) was founded in 1964 to support Arnold Engineering Development Center at Arnold Air Force Base as a graduate education and research facility. Thirteen MABE faculty members are located at UTSI where they are performing internationally recognized research in engineering, hypersonics, and aviation systems. One of academia's largest wind tunnels and a NASA Ice Contamination Effects Flight Training Device—the only one in the world within an engineering department—are located at UTSI.



NATIONALLY RECOGNIZED LEADERSHIP IN EDUCATION & RESEARCH

- Leading a \$11.3 million "Design of Next Generation eVTOL Systems" project for the US Department of Defense
- Partner in US Air Force Research Laboratory's \$9.8 million hypersonics development project
- First engineering department in the world to open a synthetic cadaver "Syndaver" lab

RESEARCH FUNDING & COLLABORATIONS

MABE faculty are funded by numerous government and private sources, including:

- Boeing
- Bosch
- ExxonMobil
- General Motors
- Lockheed Martin
- NASA
- National Science Foundation
- National Institutes of Health
- Pratt & Whitney
- US Air Force
- US Army
- US Department of Energy
- US Navy
- Volkswagen

Collaborations

- Arnold Engineering Development Center
- Air Force Research Laboratory
- Oak Ridge National Laboratory
- Manufacturing Demonstration Facility
- University of Tennessee Medical Center, Graduate School of Medicine, and College of Veterinary Medicine