

**Bagley College of Engineering at Mississippi State University**  
*MSU Strategic Plan for Transformational Change, 2023-2028*

**VISION**

*At Mississippi State, we're redefining the role of a land-grant university. We provide an innovative, hands-on learning experience, meeting all students where they are and equipping them for a world that needs their talent. We're working to help our communities prosper while exploring cutting-edge solutions to the world's biggest challenges.*

*In the Bagley College of Engineering, we recognize that this is what was in the minds of the people who created the land grant university model – we will never waver from this directive and will strive tirelessly to be innovative in how we educate our students, conduct leading-edge research, and serve our communities. Our students work on real-world projects and graduate with the technical and leadership skills they need for a successful and meaningful career. By embracing and leading change, we are taking care of what matters – for our state, our region, our nation, and our world.*

**MISSION**

*Mississippi State University is a public research, land-grant university with a mission to provide access and opportunity to all sectors of Mississippi's diverse population, as well as other states and countries, and to offer excellent programs of teaching, research, and service.*

*As the flagship college of engineering in the state of Mississippi, we serve to provide thought-provoking and skill-based programs of excellence in engineering education, research, and outreach. We strive to innovatively address the current and emerging needs of those it serves – students, faculty, and staff; the engineering profession; private sector business and industry; state and federal governmental entities; alumni; and society.*

**CORE VALUES: ADAPT**

- **A**ccessibility: Students come first
- **D**iscovery: Confronting global challenges head-on
- **A**ccelerator: Catalyzing the future for our students
- **P**resence: Challenge the status quo to enable change
- **T**eamwork: Fostering collaboration

**POINTS OF PRIDE FOR THE BAGLEY COLLEGE OF ENGINEERING**

1. *Small college feel at an R1 institution*
2. *Our students get to know their faculty like no others*
3. *We offer opportunities to gain real-world experience that prepare students for meaningful careers*
4. *Our students are helping improve communities worldwide by solving some of the world's toughest challenges*

## **DIFFERENTIATORS OF THE BAGLEY COLLEGE OF ENGINEERING AT MISSISSIPPI STATE UNIVERSITY**

1. ***“We are Autonomy U!”*** - Our faculty, staff and students are engaged in autonomy research at an unprecedented level. Our work includes the Alliance for System Safety of UAS Through Research Excellence; Ground-based On-Road and Off-Road Autonomy at the Center for Advanced Vehicular Systems; and the world’s first Agricultural Autonomy Institute.
2. ***“If you feel safe online, it is in part due to our cybersecurity efforts!”*** – In addition to holding all three major designations as a Center for Academic Excellence in Cyber Security, we offer multiple degree pathways in cyber security, including a Master of Science, Bachelor of Science, and are proposing a brand-new Bachelor of Applied Science degree. We also partner with community colleges and the military on cyber.
3. ***“We play a major role in offering resilient, reliable and inexpensive electricity!”*** - Our power curriculum is one of a handful nationally and our research and training efforts are highly regarded:
  - a. The Institute for Clean Energy Technology has developed, implemented and maintains a Nuclear Quality Assurance (NQA-1) program. This facility is the go-to for certification of filters used in nuclear power plants.
  - b. The Paul B. Jacob High Voltage Laboratory serves as an independent, non-industrial, university center for high voltage engineering. As the largest university-operated high voltage lab in North America, this facility enables full-scale evaluation of large equipment with impulses up to 3,000 kV and 1,000 kV AC-voltage.

## **MISSISSIPPI STATE UNIVERSITY’S STRATEGIC GOALS AND THE ROLE OF THE BAGLEY COLLEGE OF ENGINEERING IN ATTAINING THEM**

- **SERVE THE WHOLE STUDENT**
  - Revolutionize our curricula
  - Offer high-quality, affordable, and relevant degrees by distance to students worldwide
- **STRENGTHEN OUR BONDS**
  - Engage alumni at unprecedented levels with college and departmental open houses, road shows, and virtual events
  - Expand our impact via collaboration to boost annual giving, endowments, and planned gifts
- **IGNITE INNOVATION**
  - Develop faculty who support the teaching mission and propel MSU’s strategic research areas of addressing disparity, bringing autonomy to the mainstream, securing our future, and leading in the 21<sup>st</sup> century economy
  - Strengthen interdisciplinary partnerships within and outside of MSU
- **ELEVATE OUR COMMUNITY**
  - Enhance industrial interaction to grow experiential learning
  - Broaden the STEM recruitment funnel/pipeline through novel, engaging outreach
- **TELL OUR STORY**
  - Feature monthly student, faculty, and alumni profile stories
  - Catapult our social media presence to showcase MSU engineering