UAB SCHOOL OF ENGINEERING STRATEGIC PLAN 2025-2029 FORGING AHEAD: ENGINEERING

The School of Engineering's Strategic Plan *Forging Ahead: Engineering* builds upon and aligns closely with the overall University of Alabama at Birmingham (UAB) 2024-2028 Strategic Plan *Forging Ahead* (https://www.uab.edu/plan/forging-ahead/plan). In this document, we identify the focus areas where the School of Engineering aims to make its biggest impact over the next five years, and the metrics by which we will track and evaluate that impact.

VISION, MISSION, AND VALUES

UAB Vision: UAB is a world-class research university and academic health system committed to understanding and improving the human experience.

UAB Mission: UAB enriches society and improves health and well-being through transformational educational experiences, groundbreaking research, innovation and entrepreneurship, community engagement, and world-class patient care while serving our UAB, local and global communities.

UAB Shared Values: We CARE

Collaborate: Work as a team for the greater good.

Act with integrity: Be accountable and always do the right thing. Respect all: Champion diversity and opportunities for all, with civility. Excel: Innovate and strive for excellence in everything we do.



EDUCATION

UAB Strategic Goal: Prepare UAB's student body to become healthy, engaged global citizens and leaders by providing a world-class, socially conscious education.

UAB Engineering Strategic Goal: Cultivate a dynamic engineering environment where engaged faculty inspire life-long learners through hands-on, practical education, and where graduates are critical thinkers, problem solvers, and influential leaders in their professions and communities.





Strategic Objectives and Focus Areas

<u>UAB Strategic Objective</u>: Enroll, retain and graduate a high-achieving, diverse student body of global and local citizens empowered to think critically and act civically and professionally at UAB and beyond.

<u>UAB Engineering Focus</u>: Promote high-impact practices (e.g., experiential learning, interdisciplinary learning, global learning; First Year Experience; learning communities; and undergraduate research) and innovative academic programming.

<u>UAB Strategic Objective:</u> Recruit, develop and retain a diverse faculty and staff to lead, teach and support UAB's innovative educational programs.

<u>UAB Engineering Focus:</u> Foster a culture of lifelong learning, critical thinking and global awareness that supports and encourages academic, professional and personal development and mentorship for faculty and staff.

<u>UAB Strategic Objective</u>: Provide innovative and experiential curriculum and co-curricular experiences through "Blazer Core" that places community and connection at the heart of education.

<u>UAB Engineering Focus</u>: Provide a coherent, intellectually stimulating and community-connected undergraduate curriculum (Blazer Core and majors) to address 21st century needs/skills that is delivered through high-impact teaching and experiential learning practices.

<u>UAB Engineering Focus</u>: Provide world-class graduate and professional programs that prepare future leaders in academic research, public service, creative entrepreneurship and professional practice.

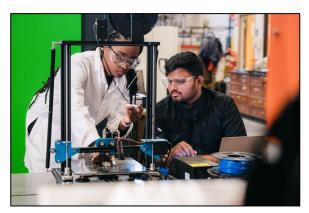
Metrics

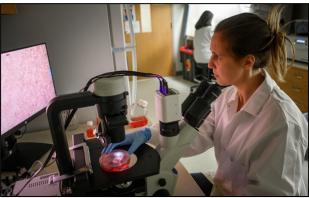
- 1. Achieve 90% participation in experiential learning programs (internships, co-ops, research, or indepth design projects outside of required coursework) by 2029.
- 2. Double the number of faculty who complete professional development courses on teaching or participate in engineering education workshops and conferences over the next five years.
- 3. Attain 90% reported success in acquiring related employment, job advancement, or acceptance for further graduate study in graduate program alumni by 2029.

RESEARCH, INNOVATION, AND ECONOMIC DEVELOPMENT

UAB Strategic Goal: Empower innovative research, scholarship and creative activities that drive knowledge and job creation focused on improving society.

UAB Engineering Goal: Promote sustainable and innovative research through multidisciplinary collaborations, computational modeling, experimental design, and development of advanced technologies to solve complex challenges that drive progress in engineering, healthcare, and beyond.





Strategic Objectives and Focus Areas

UAB Strategic Objective: Enhance UAB's institutional culture of collaboration and innovation.

<u>UAB Engineering Focus</u>: Foster collaboration and innovation and expand interdisciplinary research.

<u>UAB Strategic Objective</u>: Drive research and innovation across the enterprise.

<u>UAB Engineering Focus</u>: Strengthen and grow priority areas of research including emerging technologies and products.

<u>UAB Engineering Focus</u>: Retain, recruit and develop outstanding, innovation-focused faculty, staff and students.

UAB Strategic Objective: Improve society through processes and products.

<u>UAB Engineering Focus</u>: Improve society through innovative processes, products, and technologies.

Metrics

- 1. Increase research awards and expenditures by 50% while diversifying the mix of collaborators and funding sources participating in those awards.
- 2. Increase intellectual property disclosures to 40 per year, patent applications to 30 per year, and achieve at least one Engineering-led license or startup per year by 2029.

COMMUNITY ENGAGEMENT

UAB Strategic Goal: Engage with UAB and external communities in meaningful and mutually beneficial collaborations that contribute to the public good.

UAB Engineering Goal: Engage with UAB and external communities through innovative engineering projects and educational outreach programs that foster collaboration, promote STEM education, inspire the next generation of engineers, and address local and global challenges.





Strategic Objectives and Focus Areas

UAB Strategic Objective: Enhance the climate for student community engagement.

UAB Engineering Focus: Increase the proportion of students engaging in community activities.

<u>UAB Strategic Objective</u>: Enhance the climate for faculty and staff community engagement.

<u>UAB Engineering Focus</u>: Formalize the value of community engagement in faculty and staff roles and responsibilities in recruitment, evaluation, nomination and promotion procedures.

<u>UAB Strategic Objective</u>: Support and maintain the UAB Grand Challenge program, "Live HealthSmart Alabama," and its goals to improve the health of all Alabamians and serve as a model for the United States and beyond.

<u>UAB Engineering Focus</u>: Support and maintain the UAB Grand Challenge program, "Live HealthSmart Alabama," with a particular focus on the built environment.

Metrics

- 1. Grow the percentage of undergraduates engaged in community activities during their time at UAB to 50% by 2029.
- 2. Double the volume of built environment features installed through Live HealthSmart Alabama over the next five years to support an active and healthy lifestyle in our communities.