CLEMSON

STRATEGIC PLAN FOR

Department of
ENVIRONMENTAL ENGINEERING
AND EARTH SCIENCES

Mission:

In the Department of Environmental Engineering and Earth Sciences, we **prepare** graduates to be ethical, innovative, and effective professionals who contribute meaningfully to society; **advance** research, discovery, and engineering solutions across environmental, biosystems, and earth science disciplines; and **partner** with communities, industry, and government to protect and enhance the health of people and the planet.

Vision:

We will advance sustainable energy systems, steward natural resources, and address emerging environmental problems through a multidisciplinary, ethical, and innovative approach.

EEES Principles

1. **INTEGRITY**

   We act with honesty, accountability and fairness in our teaching, research, and partnerships.

2. **COLLABORATION**

   We engage across disciplines, sectors, and cultures to generate solutions grounded in shared purpose.

3. **INNOVATION AND IMPACT**

   We integrate curiosity, creativity, and critical thinking with scientific rigor to develop new ideas and technologies that improve human and environmental well-being.

4. **STEWARDSHIP**

   We promote, develop, and share practices that support long-term ecological and community resilience.

Goal 1 – Student Experience and Education

Deliver high-quality, relevant, and hands-on education that prepares students for impactful careers and lifelong learning, while creating an engaging, inclusive, and supportive student experience.

1.1 Curriculum Innovation – align programs with emerging industry trends, sustainability imperatives, and interdisciplinary skills.

1.2 Student Success and Support – provide resources, mentoring, and opportunities to ensure students thrive academically and professionally.

1.3 Recruitment and Retention – attract and retain high-quality students in all programs.

Goal 2 – Research Impact and Innovation

Advance impactful, interdisciplinary research that addresses urgent environmental challenges, fosters innovation, and enhances the department's national and international reputation.

2.1 Research Excellence – pursue cutting-edge projects that contribute to environmental sustainability and public good.

2.2 Infrastructure and Resources – maintain and expand state-of-the-art research facilities and tools.

2.3 Research Visibility and Dissemination – communicate research achievements to external audiences.

Goal 3 – Collaboration and Engagement

Strengthen connections with alumni, industry, government, and communities to expand opportunities, enhance relevance, and amplify the department's societal impact.

3.1 Alumni Engagement – create lasting connections and pathways for alumni to contribute.

3.2 Industry and Government Collaboration – build strategic partnerships for applied research, workforce development, and innovation.

3.3 Community and K-12 Outreach – extend the department's expertise and resources to inspire future generations and support local needs.

Goal 4 – Departmental Culture and Identity

Foster a cohesive, inclusive, and high-performing department culture that supports faculty, staff, and student success, and clearly communicates the department's value and identity.

4.1 Cohesion and Collaboration – strengthen internal connections across programs and disciplines.

4.2 Faculty and Staff Support – recruit, retain, and develop talented faculty and staff.

4.3 Visibility and Branding – communicate the department's value to internal and external audiences.

About the Department:

The Department of Environmental Engineering and Earth Sciences (EEES) advances knowledge and solutions at the intersection of engineering, environmental science, and the earth sciences. By bringing together environmental engineering, biosystems engineering, geology, and hydrogeology within a single department, EEES fosters an interdisciplinary approach to understanding and addressing complex environmental challenges in both natural and engineered systems. The department advances the development of sustainable technologies, resource management, and the protection of human and environmental health through research, education, and outreach.

EEES prepares students for industry, government, and academic leadership by combining scientific and engineering foundations with hands-on learning and research. Students engage with faculty on projects using specialized facilities and field sites that support cutting-edge research and real-world problem-solving. This integrated approach to education and discovery equips EEES graduates with the knowledge, skills, and perspective needed to address current and emerging environmental challenges and to meaningfully contribute to their communities.

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