



lead on:
**MEWBOURNE COLLEGE
OF EARTH AND ENERGY**
STRATEGIC PLAN



MEWBOURNE
COLLEGE OF EARTH AND ENERGY
The UNIVERSITY of OKLAHOMA

REVISION HISTORY

» November 2025



Executive Summary

At the University of Oklahoma, our purpose is clear: *We change lives*. As we enter the next phase of the “Lead On, University” Strategic Plan, the Mewbourne College of Earth and Energy stands ready to lead in areas critical to our state and world — from affordable, reliable energy to environmental resilience and scientific discovery.

This strategic plan builds on the legacy of excellence that defines Mewbourne College. It reflects the expertise of our faculty, the aspirations of our students and the urgency of a world rapidly evolving, where energy systems, workforce needs and societal expectations continue to shift.

Crafted by a task force of faculty, staff and external stakeholders, this plan is based on vast input from across the college collected through focus groups and public forums; it reflects our collective aspirations, values and strategies for the future. The plan is responsive to the dynamic and ever-evolving interests of our students, new research opportunities and changing employer priorities, while remaining grounded in our core strengths and values.

The plan is organized around four strategic pillars, each aligned with the University’s overarching vision for the future. These pillars — Nurture, Elevate, Expand and Champion — define how we support our people, grow our reputation, broaden our impact and foster collaboration across disciplines.

This plan is a living document. It will grow stronger through the engagement of our entire community: students, faculty, staff, alumni and partners. Your insights and feedback will help shape what comes next. Together, we will lead with purpose, advance discovery and prepare the next generation to thrive in an ever-changing Earth and energy landscape.



Vision

To empower society to thrive now and for future generations through: (i) meaningful dialog that boosts Earth and energy literacy and (ii) collaborative multidisciplinary education and research to address complex energy and environmental challenges and opportunities.

Mission

To educate scientists and engineers and create knowledge of Earth's past and present to navigate a future that meets societal needs for energy and a thriving environment. Students are equipped with broad, foundational knowledge upon which they can grow in their chosen areas of expertise, ranging from Earth's history, processes and materials to environmentally responsible development of diverse energy resources and systems.



Values

WE VALUE PEOPLE, THE MUTUAL RESPECT OF OTHERS AND INTEGRITY.

Students, faculty, staff and alumni are the core of our college. Their efforts, engagement and ideas move our college forward. Uncompromising integrity, ethics and respect for each other creates strong partnerships needed to advance learning and facilitate discovery.

WE BELIEVE IN EXCELLENCE IN EDUCATION AND RESEARCH THROUGH COLLABORATION AND ADAPTATION.

Broad collaboration from multiple perspectives contributes to the educational and research missions of the college in unique and valuable ways, producing innovative scholarship and solutions. We believe that expanding our educational and research offerings in new and exciting directions will foster innovation and prepare our students for a range of career paths.

WE BELIEVE THAT OPEN DEBATE LEADS TO EXCELLENCE.

Unfettered exchange and civil discussion of competing ideas and perspectives expand understanding, promotes inclusion and leads to excellence.

WE VALUE EDUCATION FOR THE FUTURE.

To meet the Earth- and energy-related challenges society faces, we prepare our students through curricula and activities that develop knowledgeable and critical thinkers and problem solvers.



Our Pillars

To bring our mission to life and advance the vision of Mewbourne College, this strategic plan is organized around four core pillars. These priorities reflect the distinct strengths of our college while aligning closely with OU's Strategic Plan. Together, they position Mewbourne College to support OU's bold aspirations — from becoming a top-tier public research university to driving economic and societal impact across Oklahoma and beyond.



MEWBOURNE COLLEGE PILLARS

Nurture

an environment where students, faculty, staff and community members can thrive.

Elevate

the national and international prominence of our academic and research programs.

Expand

the scope of our educational and research offerings in Earth and energy.

Champion

multidisciplinary academic and research programs across campus.

"LEAD ON, UNIVERSITY" PILLARS

Empower

students for a life of success, meaning and impact.

Lead

as a top-tier public research university.

Shape

the future through discovery, creativity and innovation.

Ascend

as ONE OU—unified by our purpose, values and strategic plan.

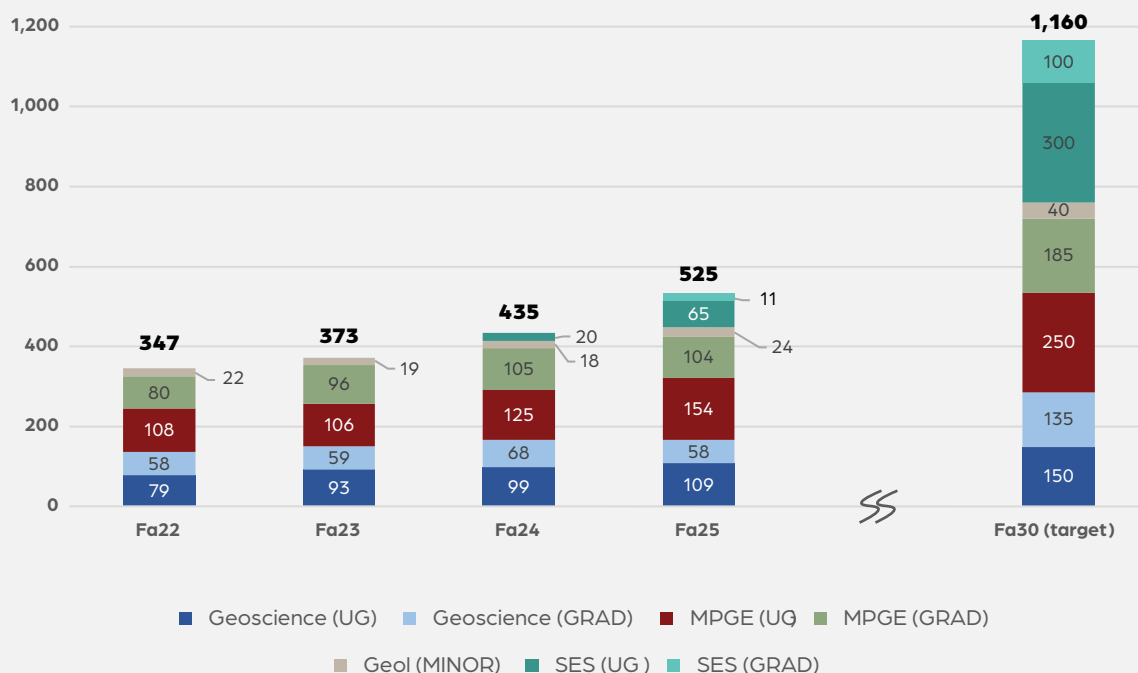


Nurture an environment where students, faculty, staff and community members can thrive.

Mewbourne College is built on the strength of its people. This pillar focuses on cultivating a welcoming and supportive environment where students, faculty, staff and community partners can grow and succeed. We recognize that student success is deeply connected to having access to: opportunity, world-class education, and experiences that change lives and shape careers.

We also know that faculty and staff thrive when they are empowered to pursue meaningful research, creative teaching and impactful service. Through holistic support systems, continuous learning opportunities and a culture rooted in mutual respect, we are creating a community where every individual can lead, learn and belong.

Mewbourne College Enrollment of Majors, Minors and Certificates



STRATEGY 1

Recruit and retain students to our innovative academic programs; provide crucial financial support; and foster a culture of success and belonging.

TACTICS

- » Recruit and retain highly motivated and capable students through collaboration with the Office of Admissions and Recruitment and by initiating strategic marketing and recruitment initiatives, including with industry organizations and partnerships.
- » Grow the Oklahoma Geological Survey education and outreach program to include intentional pathways leading to Mewbourne College academic programs.
- » Improve recruitment, retention and graduation metrics by lowering financial barriers for students to succeed.
- » Encourage a student-centered culture through faculty-student interactions and learning events, novel program structures and social activities to build a strong and healthy community of learners.
- » Use the Student Experience in the Research University (SERU) and Gallup's Q12 Survey (employee engagement survey) to identify areas of improvement and mitigation actions associated with fostering a nurturing culture of belonging.

STRATEGY 2

Ensure active learning experiences outside the classroom are available and attainable for every student.

TACTICS

- » Improve access to internships and externships by strengthening partnerships with corporate entities by leveraging university-level relationships across multiple sectors (e.g., energy, technology, business and government).
- » Grow opportunities for student engagement and experiences within Mewbourne College and the broader university community (e.g., Oklahoma Geological Survey, Sam Noble Oklahoma Museum of Natural History, Ronnie K. Irani Center for Energy Solutions and Jerry Holmes Leadership Program for Engineers and Scientists).
- » Support and enhance field trips and student experiences within the United States and internationally to expand both technical and cultural knowledge.
- » Grow and maintain undergraduate research opportunities, including access to funding and projects.
- » Cultivate student-led, community-engaged collaborations to address critical challenges facing Oklahoma, Tribal Nations, the U.S. and the world.



STRATEGY 3

Continuously increase and improve student support services, leverage partnerships, and expand community programming and access.

TACTICS

- » Review student support services to ensure excellence in academic advising, access to free tutoring and encouraging soft skill development. Leverage the Irani Center for Energy Solutions in collaboration with the Jerry Holmes Leadership Program to connect alumni mentors with students.
- » Enhance opportunities for students through service learning, such as participating in K-12 outreach activities, STEM-related community outreach activities, OGS education and outreach opportunities, and serving as student ambassadors at marquee events.
- » Create an integrated study, advising and teaching space in Sarkeys Energy Center. Evaluate the feasibility and benefit of connecting the Youngblood Library and Oklahoma Geological Survey geological publications with a great reading room on the 1st Floor of Sarkeys Energy Center. Pursue opportunities to re-open Bedrock Café.
- » Expand and enhance facilities to accommodate growth and improve access for all, including elements such as a digital visualization center, state-of-the-art interdisciplinary labs, active learning classrooms and dedicated collaboration spaces.
- » Host targeted campaigns to increase funding for student-oriented opportunities and services.

STRATEGY 4

Invest in faculty and staff success.

TACTICS

- » Create processes and practices to ensure that junior faculty are aware of resources for success and support, such as the Center for Faculty Excellence, faculty mentoring and grant writing.
- » Construct, reward and support policies to encourage faculty and research staff to pursue high-risk, high-reward activities in their teaching, research/creative activity and service roles.
- » Recognize and reward faculty and staff for dedication to events that support community outreach, service, professional development, mentoring and seeding of collaborative efforts in teaching and research.
- » Ensure strong representation on OU's Honorifics Committee for identifying and nurturing nominations from Mewbourne College.
- » Conduct an annual faculty and staff survey focusing on areas related to (1) teaching courses per year, (2) Mewbourne College communication and engagement, (3) financial support (e.g., salaries, start-up funding and graduate student stipends), (4) recognition and (5) overall satisfaction.
- » Encourage innovation and excellence in teaching through development and implementation of evidence-based approaches.
- » Incentivise the publishing and dissemination of new, innovative teaching practices and pedagogies.





Elevate the national and international prominence of our academic and research programs.

To meet the moment and shape the future, Mewbourne College must build on its legacy of academic and research excellence. This pillar outlines our commitment to raising the visibility and impact of our programs on a national and global scale. With deep roots in oil and gas education and research, a strong and growing presence in Earth sciences and energy innovation, we are uniquely positioned to lead.

By aligning our efforts with key American Association of Universities (AAU) benchmarks and expanding our research capacity, we strengthen our role in advancing the University's broader aspirations. This work ensures that Mewbourne College continues to drive discovery, attract world-class talent, and define excellence in Earth and energy science and engineering.



STRATEGY 1

Increase Mewbourne College's contributions to the American Association of Universities (AAU) metrics to strengthen the university's position for membership in the AAU.

TACTICS

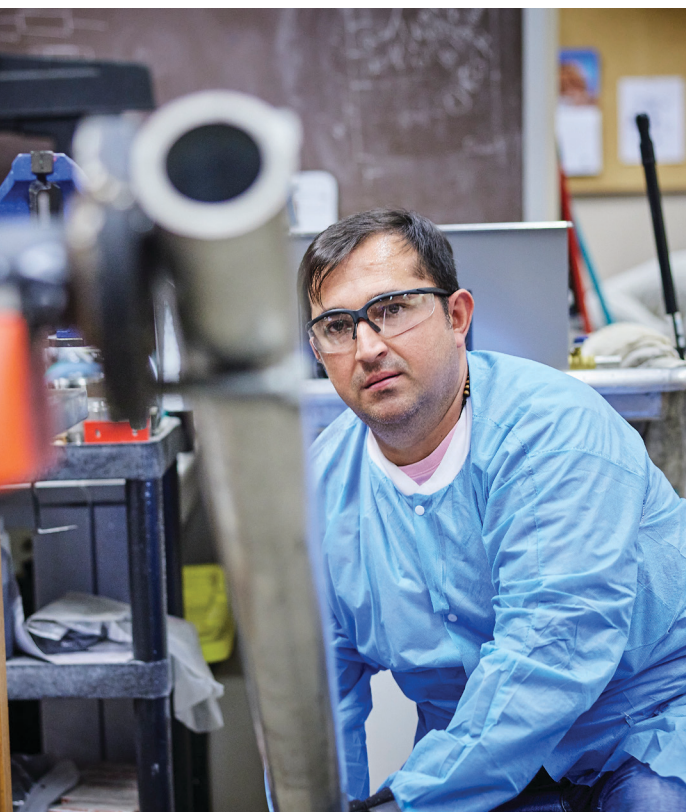
- » Grow Mewbourne College's extramural research support including pursuit of large center-scale efforts.
- » Grow research capabilities and capacities through recruitment of new faculty, research staff, postdocs and Ph.D. students.
- » Recruit aggressively for graduate student talent and establish new endowments for Ph.D. fellowships.
- » Promote nomination of faculty, staff and students for awards, recognition and fellowships at all levels (e.g., local, national and global).
- » Develop processes for acquiring annual AAU metrics for select peer departments of petroleum engineering, geosciences and state geological surveys across the nation. Improve recruitment, retention and graduation metrics by lowering financial barriers for students to succeed.
- » Benchmark and annually track Mewbourne College's contributions to AAU Phase I & II membership indicators.

STRATEGY 2

Increase support and emphasis on research activity and outcomes.

TACTICS

- » Recruit sufficient personnel to operate, maintain and upgrade critical instruments and laboratories as well as program management support to ensure operational excellence for growing our research program.
- » Build and implement a communication mechanism across Mewbourne College for sharing potential proposal opportunities, current projects and future projects to enhance cross-pollination and collaboration on research efforts.
- » Promote "100% participation" by faculty and research staff in submitting proposals for competitively funded federal research projects. Work with the Office of the Vice President for Research and Partnerships and peer colleges on campus to provide and pursue targeted support (e.g., idea seeding, collaboration and cost-sharing) to faculty and non-teaching research staff to achieve full engagement in research endeavors.
- » Support faculty in pursuing corporate research funds including development of industry consortia.



STRATEGY 3

Establish Mewbourne College as a national role model for education that aligns with our mission to develop future generations capable of addressing complex energy and environmental challenges and creating solutions that meet societal needs.

TACTICS

- » Develop, launch and market an annual “Earth & Energy Innovations” competition for students, faculty and staff.
- » Incorporate high-impact teaching practices, launch one-credit course modules for focused learning and use online tools to maximize in-class time for discussion and critical thinking.
- » Increase community education and outreach in the areas of energy literacy, seismicity, critical zone and water resources, geothermal energy, subsurface geologic storage and other emerging topics.
- » Create a comprehensive plan to develop the University Research Campus into an energy expansion demonstration site. Include assessments of the Oklahoma Petroleum Information Center, Well Construction Technology Center and other facilities to create additional synergies.
- » Maintain petroleum prominence by staying abreast of recent developments and future opportunities in petroleum geosciences and engineering. Incorporate new technologies into undergraduate courses to ensure students are ready to contribute to the modern industry.
- » Publicize the achievements of Mewbourne College staff, faculty and students. Leverage existing outlets including coordinated social-media campaigns associated with faculty, staff and student recognition (e.g., awards, internships, job placements, graduate program acceptances, research and publications). Expand distribution to target external peers.
- » Enhance utilization of Bartell Field Camp to include collaborations with other colleges at the university as well as institutions outside the university to showcase opportunities for active engagement and learning.



PILLAR THREE



Expand the scope of our educational and research offerings in Earth and energy.

The energy and Earth sciences landscape is changing rapidly, and Mewbourne College is leading the way. This pillar focuses on broadening our academic and research portfolio to meet new demands, explore emerging disciplines and prepare students for dynamic careers across the Earth and energy spectrum.

By growing programs in areas such as geothermal energy, enhanced oil and gas recovery, paleobiology, critical minerals, paleoclimate and carbon storage, we're creating new opportunities while continuing to deliver exceptional education in our foundational disciplines. This approach ensures that Mewbourne graduates are well-equipped to lead in an increasingly complex and interconnected world.

STRATEGY 1

Expand the scope of Mewbourne College to include new programs, certificates and degrees.

TACTICS

- » Expand recruitment efforts, research and corporate partnerships for the GeoEnergy Engineering Degree. Proactively engage relevant industrial sectors for (1) placement opportunities (e.g., internships, post-degree employment), (2) research partnerships and (3) financial sponsorship. Establish a curriculum assessment (program offerings versus demand sector requirements) once sufficient degrees have been awarded.
- » Target cross-college (e.g., School of Geosciences, Mewbourne School of Petroleum and Geological Engineering, Oklahoma Geological Survey and Irani Center for Energy Solutions) and cross-university (e.g., the Gallogly College of Engineering and College of Atmospheric and Geographic Sciences) collaborations in the GeoEnergy Engineering Program. Use teaching collaborations to integrate different perspectives to academic topics.
- » Broaden the reach of geosciences into growing areas for both undergraduate and graduate study, such as Hydrogeosciences, Geothermal Energy, Critical Resources, Critical Zone Geoscience, GeoHazards and Subsurface Geological Storage, as well as developing a B.S. degree in Paleobiology.
- » Grow and build upon Mewbourne College's online natural gas engineering and management program.

STRATEGY 2

Expand petroleum geoscience and engineering prominence in key subdisciplines.

TACTICS

- » Maintain faculty expertise in a broad number of key petroleum geoscience and engineering sub-disciplines; recruit appropriately to close gaps in expertise and preserve expertise in the event of faculty and staff departures.
- » Collaborate with industry to encourage high-risk/high-reward research related to newly developing plays, techniques and technologies.
- » Provide teaching and educational opportunities on industry advancements via core-curriculum and seminars in petroleum geosciences and engineering.



AREAS OF EXPANSION AND GROWTH

To meet the demands of a rapidly evolving energy and Earth science landscape, Mewbourne College is expanding into emerging research areas that complement our foundational strengths.

MINERALOGY/PETROLOGY

GEOCHEMISTRY

PALEONTOLOGY/PALEOBIOLOGY

GEOPHYSICS/TECTONICS

SUBSURFACE ENERGY

EOR AND CARBON MANAGEMENT

GEO THERMAL ENERGY

SUBSURFACE ENERGY GEOPHYSICS

CRITICAL MINERALS

STRATEGY 3

Pursue new large multi-disciplinary research opportunities that are either competitively funded (e.g., federal research proposals and projects) or directly funded by corporate, state or private entities which leverage the "Earth & Energy" aspects of Mewbourne College.

TACTICS

- » Increase visibility and expand the scope of ongoing research into seismicity, structure and tectonics, geothermal, carbon capture and storage, enhanced oil and gas recovery, critical minerals and paleoclimate.
- » Establish avenues to acquire federal or corporate funding for research and projects that target emerging geoscience arenas, improve or develop energy solutions and enhance environmental sustainability.
- » Actively target multi-entity research grants in Mewbourne College's core and emerging expertise that are federally funded (e.g., the Department of Energy, National Science Foundation, United States Department of Agriculture and National Aeronautics and Space Administration) and awarded through a merit-based process. Facilitate partnerships with other academic and research institutions to increase participation rate and acquisition success.
- » Recruit and engage corporate entities for both research and partnership opportunities. Target corporate engagements to focus on research project potentials. Build and maintain a "Laboratory Equipment Wishlist" for discussions with corporate partners for equipment dispositions, in-kind donations and access to data sets.

STRATEGY 4

Advance Oklahoma Geological Survey to a premier, nationally recognized organization.

TACTICS

- » Create a one, two and five-year development plan on how to increase Oklahoma Geological Survey visibility, improve infrastructure, secure new research grants and opportunities and leverage OGS researchers, staff and data for Mewbourne College.
- » Ensure operational mechanisms and structures are in place to incentivise and enable Oklahoma Geological Survey research staff to thrive as they pursue extramural funding.
- » Enhance infrastructure for data access and analysis (e.g., Well Viewer, online seismic publications and maps). Collaborate to maximize implementation of data structures, computing architectures and artificial intelligence/machine learning applications.
- » Ensure that Oklahoma Geological Survey cyberinfrastructure efforts are aligned with other groups at OU, industry, state and federal levels. Develop an out-year funding model for cyberinfrastructure.
- » Develop a communications protocol and staffing to raise awareness about the range of Oklahoma Geological Survey activities.
- » Develop and launch an industry consortium administered by Oklahoma Geological Survey, supported by Mewbourne College faculty participation and with sponsorship / membership from corporate partners and external entities.
- » Leverage Oklahoma Geological Survey's public service mission through closer collaboration and integration with the academic units to amplify the Mewbourne College's societal impact.





PILLAR FOUR

Champion multidisciplinary academic and research programs across campus.

Solving today's most pressing challenges in energy and the environment requires collaborative solutions. This pillar highlights Mewbourne College's leadership in building cross-campus partnerships that bring together the full breadth of OU's expertise.

While we are long recognized for excellence in petroleum engineering, geosciences and environmental Earth sciences, sustainable progress depends on multidisciplinary approaches. Through initiatives like the Sustainable Energy Systems program and the university-wide energy strategy, we are helping shape a more unified and impactful vision for energy and Earth science—one that draws strength from collaboration across disciplines, colleges and communities.

STRATEGY 1

Provide leadership to coordinate and connect environmental and Earth sciences expertise across campus to pursue new opportunities that benefit from multidisciplinary collaboration.

TACTICS

- » Partner with the Office of the Vice President for Research and Partnerships, OU's Arts and Humanities Forum, the College of Atmospheric and Geographic Sciences, Gallogly College, the Dodge Family College of Arts & Sciences and others to develop mechanisms for establishing networks and connections in the realm of environmental and Earth sciences expertise and interest.
- » Establish a university-wide faculty interest group having broad expertise and interest in environmental and Earth sciences.
- » Take inventory of areas of university-wide capabilities and capacities in terms of both academic and research programs. Identify areas of synergy and opportunities to build strong new collaborations to facilitate the sharing of ideas and discovery of opportunities in collaborative teaching and research.
- » Identify areas of collaboration and opportunities for teaming that can tackle critical research challenges, including pursuit of funding strategies to support these opportunities.





“Comprehensive universities like OU are ideally suited to be conveners of innovation, bringing together diverse stakeholders to drive positive development for complex social and technological challenges. None is more complex than energy.

Whether it's working with startups to scale next-generation geothermal technologies, collaborating with major oil companies on enhanced oil recovery or searching for new sources of critical minerals, OU is committed to helping Oklahoma — and the nation — find, launch and perfect new energy solutions.

At OU, we've proved time and again that when industry and academia come together, great things happen. As America faces its latest energy test, universities like ours stand ready to do what we've always done: innovate, partner and lead.”

JOSEPH HARROZ, JR.

President, The University of Oklahoma

STRATEGY 2

Work with the Office of the Vice President for Research and Partnerships, Gallogly College, Price College and other internal and external stakeholders to establish a campus-wide strategic plan for OU Energy.

TACTICS

- » Work with Gallogly College, Price College and other stakeholders to draft a strategic plan for OU Energy.
- » Execute the strategic plan for OU Energy using a collaborative framework, which is an overlay organizational structure that is flexible and can respond quickly to the rapidly changing energy landscape.
- » Create a strategic faculty hiring plan focused on deepening and broadening OU's energy-related expertise and securing OU's national prominence as a top energy university.
- » Realize significant increases in innovation and real impact through the delivery and dissemination of transformational research.
- » Empower student success in the energy industry through dynamic learning and discovery.
- » Strengthen and secure Oklahoma's energy future by serving and supporting the state's people, economy and industries.

STRATEGY 3

Lead in enhancing OU's brand in energy excellence by developing and growing a multidisciplinary Sustainable Energy Systems (SES) program that leverages, integrates and grows OU's excellence in energy and sustainability.

TACTICS

- » Form a campus-wide multidisciplinary task force charged with creating a compelling proposal for the SES curriculum and program.
- » Seek seed funding necessary to launch the SES program.
- » Facilitate the administration of the SES undergraduate certificate program; champion the need for cross-college collaboration and participation in teaching the SES curriculum.
- » Establish an SES graduate certificate / cohort program. Emphasize recruitment of Ph.D. students, including new funding for graduate fellowships.
- » Target increased collaboration, coursework and group projects among OU colleges (e.g., Gallolgy College, Price College, Dodge Family College of Arts and Sciences, College of Atmospheric and Geographic Sciences and College of Law) that focus on sustainable energy systems, including associated public / government policies.
- » Deepen relationships with regional professional organizations to perform outreach education on energy and environmental sustainability topics.
- » Create SES professional development courses within the Irani Center for Energy Solutions. Develop and launch professional development version of the SES certificate program.



A CAMPUS-WIDE COMMITMENT TO A SUSTAINABLE ENERGY FUTURE

The Sustainable Energy Systems program reflects Mewbourne College's leadership in advancing collaborative, cross-disciplinary solutions for a changing energy landscape. Built in partnership with multiple OU colleges, SES brings together students and faculty from across campus to explore sustainable energy from every angle — technical, economic, social and environmental.

Through certificate programs, hands-on learning and industry engagement, SES prepares students to lead in emerging sectors like low-carbon technologies, energy systems integration and policy design. The program also serves as a catalyst for research and workforce development, reinforcing OU's role as a national leader in energy and sustainability.



OU.EDU/LEADON