COLLEGE OF ENGINEERING

STRATEGIC PLAN
2020-2025

Oregon State University
Researchers at Oregon State used a machine-learning algorithm to identify patterns in the cavity shapes exhibited by nanosized porous organic cage molecules. Like sponges, these molecular materials can soak up gases discriminately and, therefore, hold the promise of more efficiently separating gases in industry. Specific applications include storing natural gas fuel onboard vehicles, capturing carbon dioxide from the flue gas of coal-fired power plants, and detecting toxic vapors.

EXECUTIVE SUMMARY

The College of Engineering’s 2015–2020 Strategic Plan set the framework for our success to date. Significant strides were made toward each of the four strategic goals — community, education, research, and partnership. Since inception of the strategic plan, the college has doubled the number of female faculty, increased research expenditures by 30 percent, increased the number of degrees conferred by 54 percent, and established itself as the premier partner to institutions around the country. Research conducted by our 200 world-class faculty has led to successful commercialization efforts in robotics and clean energy, brought opportunities to join national labs and research centers, and created a name for the college as a leader in innovation and collaboration. To support student success and access, we eliminated Pro-School and are revamping the first-year student experience.

To ensure continued success, the college undertook a strategic plan refresh in September 2018 and launched the 2020–2025 Strategic Plan on May 31, 2019. Championed by the college’s leadership team, the process was designed to be transparent, interactive, collaborative, data-driven, and well-communicated. The main objective was to gauge the progress toward the four goals and to refine the goals to allow continued competitive differentiation. The vision, mission, and core values continue to serve the college well and remain unchanged.

The leadership team established small work groups to consider internal and external environmental factors, review Oregon State University’s new strategic plan 4.0, and explore opportunities for the college for the next five years. The planning cabinet provided guidance during this process, at the end of which a draft of the four goals was presented to the college community. Through a survey, all faculty and staff had the opportunity to provide input on the draft and the college’s anticipated investments. Four task forces were formed to review the survey results, validate the goals, and build out key activities necessary to achieve our aspirations. As the final step, the leadership team used the task forces’ work and survey results to finalize the 2020–2025 Strategic Plan.

At each stage of the process, the college clarified and refined the strategic plan. It stimulated introspection that helped gather momentum toward realizing many ambitious goals. And while completing the strategic plan is a noteworthy event — the product of countless hours of collective hard work and imagination — it is not an end point, but a map the college can follow on its journey to creating a better future.
VISION

TO CREATE A BETTER FUTURE
The College of Engineering transforms lives and enhances society through impactful education and research.

In an inclusive and open environment, we produce:

— Graduates who are highly valued and in demand.
— Solutions to global challenges.
— Partnerships that ensure responsiveness to Oregon and beyond.
EXCELLENCE
Our excellence is derived from a persistent commitment to hard work, diligence, perseverance, and consistency in the pursuit of the highest quality in whatever we do.

COLLABORATION
We value engagement and connection at multiple levels in our professional lives — including work relationships, research, scholarship, service, and teaching — and believe that collaboration is an important element of our professional success.

INTEGRITY
An uncompromising commitment to honesty underlies everything we do.

INNOVATION
We value and support each other in taking risks, and we strive to create economic and societal value.

RESPECT
We respect one another in an environment in which we value, consider, and are influenced by others’ feelings and perspectives.

RESPONSIBILITY
We recognize and embrace our role in the stewardship of our students, colleagues, and Oregon’s citizens.
LEAD RESEARCH AND INNOVATION TO DRIVE BREAKTHROUGHS THAT CHANGE THE WORLD

OBJECTIVES

- Advance efforts in signature research areas:
  - Continue investments in artificial intelligence, robotics, advanced manufacturing, clean water, materials science, and clean energy
  - Accelerate investments in computing, resilient infrastructure, and health-related engineering
  - Identify and support innovative and emerging initiatives
- Enable research and innovation by broadly investing in facilities, equipment, and support services
- Promote excellence in research and innovation by investing in our highly capable faculty, staff, postdoctoral fellows, and students

PERFORMANCE GOALS

- Double the number of society fellows and externally funded graduate research fellows
- Double the number of our faculty who are sought after as subject matter experts in a specialty area
- Double the number of named faculty positions
- Lead two additional externally funded centers in recognition for our collective talents and capabilities
PROVIDE A TRANSFORMATIONAL EDUCATION THAT PRODUCES GRADUATES WHO DRIVE CHANGE THROUGHOUT THEIR LIVES

OBJECTIVES
• Deliver innovative experiences that:
  ◦ Incorporate authentic, complex, and open-ended engineering problems
  ◦ Create inclusive and welcoming learning environments throughout the college
  ◦ Perpetuate excellence in communication, ethics, and professionalism
• Engage students in career preparation that focuses on their lifelong success
• Create a new paradigm for graduate student mentoring that focuses on retention, graduation, and career success

PERFORMANCE GOALS
• Surpass Oregon State University’s goals for retention and graduation of all learners
• Enable all our students to reach the next step of their career aspirations as measured by exit and post-graduation surveys
• Demonstrate through alumni and employer surveys that our graduates are change agents and embody the core characteristics of the Oregon State Engineer
CULTIVATE A COMMUNITY THAT EMBODIES COLLABORATIVE AND INCLUSIVE EXCELLENCE

OBJECTIVES

- Purposefully recruit and advance employees and students to create a culture that embraces diversity, equity, inclusion, and belonging
- Amplify our commitment to celebrating accomplishments that uplift and inspire the success of every member of our community
- Practice transparency in defining our shared values and goals

PERFORMANCE GOALS

- Demonstrate through surveys that every member of our community feels valued
- Achieve “Gold” status in the Deans Diversity Initiative from the American Society for Engineering Education
- Lead professional societies in developing national initiatives that promote an academic culture of inclusive excellence
ESTABLISH THE COLLEGE AS A PARTNER OF CHOICE

OBJECTIVES

- Create a gateway to our engineering talent to advance mutually beneficial relationships
- Maximize the positive impacts of private investments through best-practice cultivation and stewardship
- Accelerate activities that impact economic development in the region
- Build influence with state and federal decision makers

PERFORMANCE GOALS

- Triple the number of partners that are strategically engaged as demonstrated by student recruitment, alumni network, stakeholder engagement, and investment
- Exceed campaign goals for individual engagement as measured by participation, volunteerism, and philanthropy
- Identify an expanded sphere of our influence with decision makers
• Invest in equipment, laboratories, and infrastructure
• Establish a Strategic Research Council to help attain the research goal
• Provide faculty support for large center-level proposals
• Raise our profile with funding agencies
• Operationalize multi-year offers for top Ph.D. students
• Invest in computing infrastructure
• Improve classroom space for student success
• Implement a common first-year experience
• Expand support for student groups
• Provide meaningful opportunities to discuss and improve teaching
• Expand online opportunities for all learners
• Offer full-tuition scholarships to GEM Ph.D. scholars
• Establish a Community Advisory Council to help attain the community goal
• Improve internal transparency with regular updates and annual summative communication
• Establish a student travel fund
• Continue to support dual-career opportunities for faculty
• Invest in communication efforts, including enhancing our website
• Align advancement efforts with strategic goals
• Implement an industry partnership program
• Build connections with alumni and friends by enhancing engagement opportunities