



UW-MADISON STRATEGIC PRIORITIES

- 1 Provide the best undergraduate education possible, engaging students in our public research mission
- 2 Live the Wisconsin Idea
- 3 Invest in research areas in which we have current and potential strength
- 4 Recruit and retain the best faculty and staff
- 5 Enhance diversity and inclusion to advance excellence
- 6 Be careful stewards of our resources

UNIVERSITY PRIORITIES

Provide the best undergraduate education possible, engaging students in our public research mission

- ◆ *Improve access by significantly increasing need-based financial aid*
- ◆ *Transform the curriculum to reflect changes in scholarship and science and to ensure integrative thinking*
- ◆ *Promote teaching excellence among our faculty, staff, and graduate teaching assistants*
- ◆ *Integrate more effectively students' classroom and out-of-classroom experiences, with emphasis on internships, field-based and service learning, entrepreneurship, capstone experiences and study abroad*
- ◆ *Create physical space and technology infrastructure to support our best-practice teaching and learning*

COLLEGE OF ENGINEERING ALIGNMENT

Improving financial aid:

- Departments are encouraging majority faculty/staff participation in the Great People, Great Place scholarship campaign
- Need-based scholarship funding is directly supported to offset differential tuition
- The college development team is working to expand alumni support for undergraduate scholarships

Transforming the curriculum:

- Vision 2010 and Beyond, working to transform engineering education to meet 21st century needs, has made progress amid cultural obstacles to change; this plan has already led to fewer course redundancies
- The new Integrated Studies in Science, Engineering & Society Certificate gives our students vital grounding in the social sciences and humanities
- College faculty created the campus-wide Ways of Knowing program, which introduces beginning scholars to the methods of different academic disciplines
- A new "Grand Challenges" course gets first-year students across campus (141 students in fall 2009) engaged in some of the greatest challenges facing engineers and society, including energy and sustainability, with the goal of attracting more student diversity

Promoting teaching excellence:

- A Teaching Improvement Program is in place for all college faculty, instructors and TAs
- COE faculty served as founding members of the UW-Madison Teaching Academy and support and participate in the DELTA program
- More than 20 COE faculty have received campus-level awards for teaching excellence

Broadening the student experience:

- The Schoofs Prize for Creativity and Tong Prototype Prize encourage advanced problem solving and ingenuity in undergraduates that puts many on the road to becoming successful entrepreneurs
- Engineers Without Borders students reach out to Wisconsin and the world with recent projects in El Salvador, Kenya, Haiti and the Wisconsin Red Cliff reservation
- COE hybrid vehicle teams are highly competitive on the national stage, winning competitions in recent years for clean and fuel-efficient SUVs, formula cars and snowmobiles
- More than 800 students participate each year in engineering's highly networked co-op/internship program

Supportive space and technology:

- Students have responded with great enthusiasm to the Engineering Centers Building, which supports student organizations and hands-on projects, from hybrid cars to concrete canoes
- The new Student Learning Center supports tutoring, peer-to-peer mentoring and group study, which has produced increased retention rates
- A rebuilt main floor of Engineering Hall has created an exciting central commons for the college, with expansive space for social interaction and collaborative teamwork

UNIVERSITY PRIORITIES

Live the Wisconsin Idea

- ◆ *Improve communications*
- ◆ *Focus and highlight our efforts in areas where public problems overlap with university strengths, such as alternative energy, environmental protection, public health, education, internationalization, and governance*
- ◆ *Transfer knowledge and technology to promote economic development*
- ◆ *Build vibrant and mutually beneficial relationships with government officials, and community and state business leaders*
- ◆ *Enable faculty and staff to establish productive collaborative relationships across the university, the state, and the world*

Invest in research areas in which we have current and potential strength

- ◆ *Promote innovation and interdisciplinary connection*
- ◆ *Improve our research infrastructure, including pre- and post-award management and compliance*
- ◆ *Increase funding and support for graduate students*
- ◆ *Invest in the liberal arts, with special emphasis on the humanities*

COLLEGE OF ENGINEERING ALIGNMENT

COE Wisconsin Idea Initiatives:

- A reorganization led to the creation of an external relations team to strengthen relationships with alumni, industry, communities and prospective donors
- The COE Trace Center, a world leader in making modern technology available to people with disabilities, developed accessibility programs that are now a core part of all Windows and Macintosh operating systems
- Engineering Professional Development, one of the world's largest engineering continuing education providers, reached more than 16,000 working professionals in 2007
- College faculty, staff and students reported 150 invention disclosures in 2007, marking the eighth consecutive year the college has topped 100 disclosures
- Engineering research has been a wellspring for dozens of spinoff companies, including Virent Energy Systems, Soft Switching Technologies, nPoint Nanotechnology, Nimbelgen Systems, NeuWave Medical, Imago and Platypus Technologies
- Major research centers within COE are focused on vital societal issues such as energy and sustainability, medical technology, nanotechnology, population health, pollution remediation, transportation and disability access
- COE has 43 research centers and 16 industry consortia that allow faculty, staff and students to share expertise and launch mutually beneficial projects with nearly 300 companies and agencies

Research investments:

- The UW-Madison Energy Institute focuses the expertise of more than 50 researchers across campus on core U.S. energy challenges in areas such as biofuels, nuclear energy, power distribution and electronic systems
- The translational research program in biomedical engineering works to find medical technology solutions to clinical problems and unmet needs, often by working directly with bedside physicians
- College of Engineering faculty have made major contributions to the university's core research strengths in medical technology, genomics, stem cell research, population health and environmental stewardship
- A \$15 million National Science Foundation center housed at COE helps support 30 faculty and 40 graduate students across more than a dozen UW-Madison departments
- COE has been a campus leader in research administration by reorganizing staff for improved faculty service support and new administrative tools
- The College of Engineering has the largest percentage of supported RAs among all UW-Madison colleges
- COE alumni have been major donors to the humanities via building and program gifts, such as the Holtz Center for Science & Technology Studies

UNIVERSITY PRIORITIES

Recruit and retain the best faculty and staff

- ◆ *Make progress toward reaching the median of our peer group in faculty salaries and the relevant market medians for staff*
- ◆ *Use recruitment and retention funds strategically to support existing/emerging areas of strength and innovation*
- ◆ *Promote the passage of domestic-partner benefits*
- ◆ *Enhance department cultures and hiring practices to ensure diversity*
- ◆ *Continue to build an intellectual culture*
- ◆ *Support and develop our faculty and staff to enable them to do their best work*

Enhance diversity and inclusion to advance excellence

- ◆ *Prepare all students for a world that is diverse, global, and interconnected*
- ◆ *Step up efforts to recruit and retain underrepresented students, faculty, and staff*
- ◆ *Build a climate that respects all members of our community*
- ◆ *Implement diversity accountability standards*
- ◆ *Align our diversity, equity, and inclusion efforts campuswide*

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Faculty and staff initiatives:

- The college is aggressive in its approach to faculty hiring and retention, and has set—and consistently meets—a goal of retaining 90 percent of all faculty approached with outside offers
- The college strongly recognizes the need for domestic partner benefits, and recently lost a top professor because of the lack of domestic-partner benefits in Wisconsin
- COE is administrative home to the Women in Science and Engineering Leadership Institute (WISELI), a campus-wide program that addresses roadblocks to women's academic advancement
- The college has long required training for faculty search committees, and that program is now supported by WISELI
- The college strongly supports the Great People, Great Place initiatives to create more endowed faculty positions and directly support graduate student lines
- The college has a strong track record of landing NSF CAREER awards to help advance the work of faculty early in their careers, and a strong tradition of investing internal resources in start-up labs

College diversity priorities:

- COE is working significantly harder to create an ethic that values diversity in our faculty, staff and students, and infuses responsibility for the challenge into all program areas
- A committee on equity and diversity is working with departments to enhance strategies for recruiting diverse faculty
- Engineering Diversity Affairs has extensive programs introducing K-12 students from underrepresented groups to the world of engineering, including residential summer programs for more than 400 students annually
- Academic support for enrolled students includes tutoring on request, a mentoring program for first-year students and five affinity groups supporting students of color
- A Corporate Diversity Scholars program provides a direct avenue for companies, such as Rockwell Automation, to support COE students and build a more diverse engineering workforce
- The Graduate Engineering Research Scholars program leads all Big Ten universities in producing PhD graduates from underrepresented groups

UNIVERSITY PRIORITIES

Be careful stewards of our resources

- ◆ *Align our resources with our priorities*
- ◆ *Transform our administration and governance to be effective, efficient, and flexible*
- ◆ *Investigate new models of funding*
- ◆ *Advance environmental sustainability on campus*
- ◆ *Improve our technology infrastructure*
- ◆ *Honestly and openly assess and report progress*

COLLEGE OF ENGINEERING ALIGNMENT

Financial stewardship at COE:

- The college has been a campus innovator in strategic planning, with a focus on aligning college resources with its most pressing needs
- COE implemented differential tuition as an essential way to address both rising costs and the need to transform the engineering degree
- A college effort to streamline and share support services across multiple departments, while going through big challenges in implementation, has shed light on the difficult but important goal of centralizing services
- The college's current development goals place a premium on raising flexible funds that can help COE respond quickly to new and unexpected challenges
- Most college classrooms are equipped with teaching and learning technology as part of a long-term initiative by Computer-Aided Engineering and Engineering Media Services
- The college is a major player in the We Conserve Initiative run by Facilities Planning and Management, conducting an energy audit of the new Rennebohm Pharmacy Building and creating a new energy monitoring tool for campus-wide use



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