

***UWM College of Engineering and Applied Science Mission, Vision,
Strategic Goals and Sub-Goals*
2006-08***

Mission: Provide world-class education, research, and services and act as a catalyst for economic development with a focus on the diverse needs of Southeastern Wisconsin.

**Vision: - We will be recognized for providing the best education in Wisconsin.
- The college will be nationally prominent in research and service and be valued as a resource for industry and the community.**

Goals:

1. Improve responsiveness to the needs of business, industry, government, and the scientific community.
2. Attract highly qualified students with potential for intellectual development, innovation, and leadership. Retain and graduate each student, including women, minorities, part-time and financially disadvantaged.
3. Improve financial situation through more novel education programs and fund raising.
4. Develop areas of research excellence for technology transfer, which will build partnerships with industry.

*Approved by the CEAS Faculty on October 21, 2005

Strategic Goal #1: Improve responsiveness to the needs of business, industry, government, and the scientific community.

SUB-GOAL	MEASUREMENT	RESPONSIBILITY (Who/What Area?)	ACTION
<p>IA Align research programs with industry and government needs.</p>	<ul style="list-style-type: none"> • Level of funding from industry to UWM • Level of funding from government to UWM • Joint proposals submitted/funded • Increase in number of companies, patents, and papers • How much of research was used to develop technology and embedded in product • Increase Co-Op opportunities • Increase Graduate Internships 	<ul style="list-style-type: none"> • Vice Chancellor for Research • Dean • CEOs of companies • Faculty 	<ul style="list-style-type: none"> • Seek input of industry, survey their needs. • Use IABs more actively • Expand the charter of CEAS ILC to foster greater research • Enhance the interactions between CEAS' ILC and department's IABs • Provide infrastructure support • Encourage collaborative research • Establish a workload policy that provides incentives to conduct sponsored research • Establish relationships with ILC members at a high level • Establish a research consortium of local industry, NSF, NIH, DOD, DOE, and other governmental agencies to attract local and governmental research funding and build a reputation in niche areas where there are strengths. (Industry would have the problem, funding, and expertise) • Encourage industry sabbaticals • Top down better since tough for starting Asst. Prof. to go to industry
<p>IB Align curriculum with needs of industry.</p>	<ul style="list-style-type: none"> • Quality of graduates • Feedback from industry • Increase Co-Op opportunities. 	<ul style="list-style-type: none"> • Departments and their IABs • Dean's office • CEAS ILC 	<ul style="list-style-type: none"> • Seek input of industry, survey their needs. • Use IABs more actively • Enhance the interactions between CEAS' ILC and department's IABs

Strategic Goal #1 (Continued)

SUB-GOAL	MEASUREMENT	RESPONSIBILITY (Who/What Area?)	ACTION
<p>IC Establish CEAS as a highly respected research university within the scientific community.</p>	<ul style="list-style-type: none"> • Track overall ranking (2005: 128/179) • Track departmental ranking (2005: CE 94/139; CS 65/134; EE 106/168; IE 51/73; MAT 65/88 and ME 51/164) 	<ul style="list-style-type: none"> • Chancellor • Dean • Dean’s office • CEAS faculty 	<ul style="list-style-type: none"> • Improve <i>US News & World Report</i> ranking to top 50 or better amongst doctoral granting public institutions in ten years. • Develop critical mass in areas with world-class leadership/reputation in selected areas • Improve our reputation amongst our academic peers, employers and corporate recruiters • Increase our student selectivity (mean GRE scores of incoming students, acceptance rate) • Improve student to faculty ratios • Encourage faculty to strive for NAE (National Academy of Engineering) membership • Increase the number of doctoral degrees granted • Increase the total research expenditures
<p>ID Increase the visibility of CEAS in the community.</p>	<ul style="list-style-type: none"> • Track “positive” articles about CEAS in the press • Track number of times faculty is asked their expert opinion for TV and press articles 	<ul style="list-style-type: none"> • Chancellor • Dean • Dean’s office 	<ul style="list-style-type: none"> • Seek input of industry, survey their needs. • Advertise, market, and “sell” existing capabilities (use experts) • Establish relationships with ILC members at a high level. More understanding needed at <u>top</u> levels • Encourage faculty involvement in local and statewide professional organization activities

Strategic Goal #2: Attract highly qualified students with potential for intellectual development, innovation, and leadership. Retain and graduate each student, including women, minorities, part-time and financially disadvantaged.

SUB-GOAL	MEASUREMENT	RESPONSIBILITY (Who/What Area?)	ACTION
<p>2A Develop and market a coherent mix of opportunities, scholarships and programs that appeal to and attract highly qualified students.</p>	<p>A <u>targeted increase</u> in the percentage of undergraduate students who are eligible to enter the program at the calculus level by 2010.</p> <p>A <u>targeted increase</u> in the percentage of graduate students who enter the program with at least a 3.25 GPA by 2010</p>	<p>Dean's Office</p>	<ul style="list-style-type: none"> • Establish benchmarks for the percentage of targeted students. • Initiate an Honors Program for CEAS students • Develop an Undergraduate Research Program • Increase the amount of scholarship funding • Develop a marketing/recruitment plan to promote new programs for highly qualified students • Enhance articulation agreements with other colleges
<p>2B Ensure that students admitted can be successful in engineering</p>	<p>A <u>targeted increase</u> in the 1-year retention rate of new students by 2010.</p> <p>A <u>targeted increase</u> in the 6-year graduation rate students by 2010.</p>	<p>Dean's Office</p>	<ul style="list-style-type: none"> • Establish benchmark retention and graduation rates. • Establish a freshman mentoring program • Institute an early intervention program for new students • Improve instruction for engineering students in elementary math and science courses. • Hire an academic advisor to assist coordination of retention efforts. • Develop a full range of accelerated remedial programs or a remedial track. • Develop freshman courses that illustrate the application of mathematics and science to engineering principals • Hire instructional academic staff to teach and coordinate pre-engineering programs. • Change in admission requirements
<p>2C Improve the climate for women and students of color</p>	<p>A <u>targeted increase</u> in the enrollment of women and students of color by 2010.</p> <p>A <u>targeted increase</u> in the number of women and minority faculty and staff.</p>	<p>Dean's Office</p>	<ul style="list-style-type: none"> • Establish benchmarks for student enrollment and number of faculty and staff. • Hire a recruiter to visit MPS high schools (combine with advisor in 2B) • Provide additional College support for student organizations that promote diversity in engineering. • Encourage and support faculty and instructional staff attendance at professional development opportunities that assist in learning methods to teach courses to a diverse student body. • Utilize best practices in recruitment to expand the diversity of candidate pools for faculty and staff positions

Strategic Goal #3: Improve financial situation through more novel education programs and fund raising.

SUB-GOAL	MEASUREMENT	RESPONSIBILITY (Who/What Area?)	ACTION
<p>3A Expand alumni fundraising from \$150K to \$400K by 2008. (\$50 k per year per department, \$100 k per year by Dean)</p>	Dollars	Dean, Department Chairs	<ul style="list-style-type: none"> • Engage and improve relations with students • Create events with students/parents and alumni • Do fund raising campaigns involving students and alumni
<p>3B Develop educational programs from 0 to raise \$250K/year by 2008. (one program per department)</p>	Dollars; Courses offered	Department Chairs	<ul style="list-style-type: none"> • Create certificate programs • Create short courses • Create cohort degree programs
<p>3C Expand corporate fundraising from \$100K to \$600K per year by 2008.</p>	Dollars	Dean	<ul style="list-style-type: none"> • Expand relations with industry to secure support • Create named laboratories, classrooms, building, etc. • Create named scholarships, fellowships, undergraduate research positions • Create named professorships

Strategic Goal #4: Develop areas of research excellence for technology transfer, which will build partnerships with Industry

SUB-GOAL	MEASUREMENT	RESPONSIBILITY (Who/What Area?)	ACTION
4A Update existing criteria for creating and maintaining research areas of excellence to reflect best practices and evaluate each existing area of excellence against the updated criteria.	Updated criteria for establishing and maintaining research areas of excellence.	Associate Dean for Research and the Academic Planning Committee	<ul style="list-style-type: none"> • Update existing criteria • Evaluate existing areas of excellence against the updated criteria
4B Establish 3 nationally recognized and externally funded areas of research excellence (each with over \$1.0M/year) with goal of technical transfer by 2008.	Centers established and funded	Dean and faculty	<ul style="list-style-type: none"> • Create research infrastructure (grant writer, support staff) • Identify/create major research funding opportunities in selected areas • Provide time and assist faculty to write major proposals • Recognize and reward major research accomplishments • Recruit high caliber faculty
4C Expand research funding from \$3.5M to \$7.0M per year by 2008.	Research dollars in 2006, 2007, and 2008.	Dean and faculty	<ul style="list-style-type: none"> • Create research infrastructure (grant writer, support staff) • Identify research funding opportunities for faculty • Assist faculty with research seed funds • Provide time and assist faculty to write major proposals • Recognize and reward major research accomplishments • Redistribute teaching load among faculty based on the level of research activities • Recruit high caliber faculty in critical mass areas
4D Generate at least 1 new patent or copyright in each of the three areas of excellence with substantial (>\$1 M/year) revenue by 2010.	Number of patents with potential for major revenue on an annual basis and royalty dollars in 2010.	Center Directors and faculty	<ul style="list-style-type: none"> • Educate faculty about patents and tech transfer • Assist faculty with research seed funds • Recruit high caliber faculty in selected areas