STRATEGIC PLAN

School of Civil & Environmental Engineering and Environmental Science (CEES)
University of Oklahoma

July, 2009
MISSION STATEMENT

The mission of the School of Civil Engineering and Environmental Science is to provide a high-quality educational experience for undergraduate and graduate students in the areas of architectural, environmental, geotechnical, structural, and transportation engineering and environmental science. The educational experience is accomplished through innovative classroom instruction aided by computer and multimedia-based instruction, laboratory experiences and student mentoring. The products of this experience are engineers and scientists capable of critical thinking, devoted to a lifetime of learning, and highly sought after by employers.

GOAL 1 Enhance undergraduate programs through excellence in experiential learning and innovation in knowledge delivery.

CEES will:
1. Maintain accreditation for all undergraduate programs.
2. Implement Honors sections of Rigid Body Mechanics and Strength of Materials
3. Expand/formalize our industrial “internship” for academic credit program.
4. Develop an “internship” program for service learning programs (e.g., EWB)
5. Continue/expand interest in student design competitions in association with the new EPF.
6. Implement “Sooner Village” concept into undergraduate curricula.
7. Update instruction to include “state-of-industry” tools and software.
8. Implement Fundamentals of Engineering Exam review sessions

GOAL 2 Enhance the college community through outreach, mentoring and diversity.

CEES will:
1. Enhance promotion of programs to prospective students
2. Provide competitive scholarships, fellowships and stipends based on scholastic merit and leadership potential.
   a. By the year 2015, CEES will annually award twenty $3,000 undergraduate scholarships and three $15,000 graduate fellowships.
3. Assess and improve the effectiveness of mentoring, tutoring, and advising.
4. Will design, build, test, and implement innovative authentic, guided-inquiry K-12 activities related to the WaTER Center and the Natural Hazards Center.

GOAL 3 Enhance the impact of research and graduate education programs through interdisciplinary collaboration, strategic partnerships, student scholarship, and faculty development.

CEES will:
1. Continue to pursue funding opportunities in emerging areas consistent with our faculty expertise.
2. Expand international collaborations of the graduate research programs.
   a. Participate in exchange programs
   b. Expand collaborative research efforts with partner universities
3. Pursue an integrated Natural Hazards Research Center addressing hurricanes, tornadoes, flooding, heavy rainfall, landslides and earthquakes
4. Continue to pursue funding opportunities through the Oklahoma Transportation Center/University Transportation Center.
5. Expand collaboration with the College of Earth and Energy on research related to poromechanics and its applications
6. Build on the existing strengths and expand research related to geo-infrastructure such as levees and renewable energy infrastructure such as wind turbine foundations.
7. Continue to develop and expand activities associated with the WaTER Center.
8. Strive to secure more endowed positions in order to retain highly productive faculty
9. Increase enrollments and degrees conferred.
   a. By year 2015 CEES will have 200 undergraduate, 100 M.S., and 35 Ph.D. students.
   b. By year 2015 CEES will annually award: 45 B.S., 25 M.S., and 10 Ph.D. degrees.
10. Strive to obtain new faculty lines and/or joint appointments in target areas in order to achieve its ambitious goals to become international leaders in strategic areas.
11. Accommodate the increased demand for non-thesis Master’s degrees and develop teaching plans to accommodate more part-time Master’s students.
12. Have students actively participate in research, technological innovations, and knowledge dissemination.
   a. Graduate Student Center (GSC) will be established to promote interdisciplinary synergy, sense of identity and community.
   b. 50% of full time graduate students will actively participate as graduate research assistants.
   c. 75% of Master students will pursue thesis option.
   d. 75% of graduating PhD students will co-author presentations at national/international conferences.
   e. 90% of graduate research assistants will co-author peer-reviewed publications.
13. Actively participate in information dissemination in the refereed literature.
   a. By the year 2015 the CEES publication rate will be 3.0 publications per FTE per year.