Mission Statement

The mission of the Department of Civil and Environmental Engineering (CEE) at Mississippi State University is support the goals and objectives of the university and its parent unit; the Bagley College of Engineering. This mission manifests itself in the areas of education, research, and service. The strategies employed to support this mission are devised to efficiently utilize departmental resources and often address one than one mission area.

CEE is committed to providing a high quality educational experience at the baccalaureate, masters, and doctoral level. Our goal is to provide students with the prerequisite technical knowledge, analytical skills, and professional values needed to become successful professional engineers. Our expectations for our students are that they will develop an understanding that there is a need for lifelong learning and cultivate a sense of responsibility to the needs of society and the profession. We embrace the concept that the first best standard of success for all of our graduates is their attainment of professional engineering registration and that preparing them to achieve this level of professional development also prepares them for all of the career options open to civil and environmental engineering graduates.

Vision

The Department of Civil and Environmental Engineering will maintain an ABET-accredited undergraduate program that is recognized nationally for producing well-qualified graduates prepared for engineering practice and graduate education. The department strives to develop and nurture its growing graduate program and its externally funded research program. The graduate program will attain national prominence in the primary areas of emphasis and regional prominence in all supported areas.

These programmatic activities will support, and be supported by, an active research effort in selected areas. These areas will be identified, in part, by the recourses made available to the department by internal and external sources in an effort to develop programs of excellence rather than attempt to equally support research activities in all of the technical areas that relate to civil and environmental engineering. Areas of research focus will also be identified by
service and outreach mission opportunities and the educational needs our students.

The service and outreach component of the department’s mission will support the efforts of the university and college to continue building on its land-grant tradition and statewide presence through partnerships with state agencies, business, industry, and organizations. Opportunities related to continuing education, research, program develop and review, and technology transfer will be supported within the limits of resources available.

Departmental resources will be developed in a way to support the vision summarized above. The department will work to develop and maintain appropriate office, instructional, and research facilities. Allocation of resources will focus on targeted educational needs, diverse student activities, and selected research areas.

**Strategic Plan**

The Department of Civil and Environmental Engineering, in an effort to support the mission and realize the vision outlined, had adopted four strategic components as part of a strategic plan:

1. Provide an enriched undergraduate academic program that prepares graduates for productive careers and life-long learning.
2. Provide a vibrant graduate academic and research program that produces new discoveries and knowledge.
3. Improve and maintain state-of-the-art teaching and research facilities that support the educational, research, outreach, and service objectives of the department, college, and university.
4. Continue to recruit and develop a highly-qualified and motivated faculty and staff.

Activities related to these four strategic points will include, but not be limited to, the following actions and activities:

1. Undergraduate program
   a. Increase the size of the undergraduate program through a program of supporting the MSU Admissions Office and Bagley College of Engineering recruiting efforts and increasing retention. We will develop materials and programs which clearly define the discipline and focus on attracting bright, dedicated students. As appropriate and when possible, we will provide faculty, staff and students to support university recruiting activities. Contingent upon fiscal and human resource availability, the goal is to increase enrollment to 350 students by 2012.
b. Develop and maintain an undergraduate coordinator position with clearly defined responsibilities and implementation resources, including partial summer support as needed, to support an organized information program.

c. Tenure-track faculty, research faculty or post-doctoral assistants will teach all undergraduate courses except when individuals reaching the competition of their Ph.D. are provided a limited instructional opportunity as part of their professional development.

d. Maintain a program of curriculum review and change as appropriate to insure graduates are technically and professionally prepared for the work place and which supports that ABET requirements of self-study.

e. Develop and maintain the best possible educational facilities, including the construction of a new Civil and Environmental Engineering Complex to be completed in or before 2012.

f. Develop and maintain modern laboratory facilities for each of the technical areas supported by the department’s educational mission.

2. Graduate program

a. Increase the size of the graduate program through a program of supporting the MSU Graduate School and Bagley College of Engineering recruiting efforts and undertaking a departmental-level program of graduate student recruiting. We will develop materials and programs which clearly define the research and educational opportunities available and the career enhancements of an advanced degree. We will focus on attracting bright, dedicated students. Contingent upon fiscal and human resource availability, the goal is to increase enrollment to 90 students by 2012 with at least one third of these being PhD candidates.

b. Develop and maintain a graduate coordinator position with clearly defined responsibilities and implementation resources, including partial summer support as needed, to support an organized information program.

c. Maintain a uniform departmental guideline regarding graduate degree requirements.

d. Develop a clearly defined departmental policy governing faculty participation in the graduate program and externally funded research that is consistent with the Bagley College of Engineering goals and objectives.

e. Increase the total external funding to the department for research activities to a level of $4.0M annually by 2012. This objective is contingent upon a significant increase in faculty, staff, and graduate students.
f. Develop and maintain a level of average annual proposal submission equivalent to about five per faculty with an emphasis on national and multi-year funding opportunities.

g. Support and expand the off-campus and distance education graduate programs by increasing resources and support for faculty involved in these programs. Identify an appropriate support structure and the level of resources that will be allocated to these programs.

h. Establish post-doctoral support positions in each of the identified areas of research excellence to facilitate growth of the research program in these areas. If possible, allocate development funds to provide a foundation for this program.

i. Utilized development and endowment funds, as augmented by Bagley College of Engineering resources, to provide support for the best and brightest graduate students.

j. Secure E&G funding to support graduate teaching assistantships for individuals supporting undergraduate laboratory activities.

k. Develop effective electronic and paper graduate recruiting materials.

l. Develop and maintain the best possible educational facilities, including the construction of a new Civil and Environmental Engineering Complex to be completed in or before 2012. This includes modern laboratory and office facilities dedicated to the graduate education and research activities for each of the technical areas supported by the department’s educational and research missions.

m. Increase the number of peer-reviewed publications per faculty member to match the Bagley College of Engineering average each year.

n. Establish a strategic alliance between the Department of Civil and Environmental Engineering and appropriate research centers and academic units.

3. Service and Professional Development

a. All members of the faculty will be licensed professional engineers.

b. Develop and maintain a substantial level of faculty participation in the activities of local, statewide, and national professional organizations. This participation is to include participation in technical programs, publication in organization proceedings and journals, leadership involvement in committees and society operations, and membership in appropriate professional and technical organizations.

c. Maintain active ASCE, Chi Epsilon, and ITE student chapters.

d. Support the continuing educational activities of individuals in the state, including providing distance education offerings, on-campus and off-campus workshops and seminars, registration review
sessions for undergraduate and graduate engineers, and select continuing and lifelong learning programs.

4. Facilities
   a. Secure internal and external funds sufficient to construction a new Civil and Environmental Engineering Complex suitable to support the strategic plan components outlined above.
   b. Develop appropriate laboratory and research facilities to allow expansion of the educational and research program activities in existing technical areas and new areas as deemed appropriate for the human and external funding resources that are available.
   c. Provide space for student projects and team activities related to instruction of student organization activities.
   d. Provide a positive environment for education and research.
   e. Provide a positive work environment for faculty and staff.
   f. Support the university mission(s) regarding conferencing, distance education, instruction, and regional identity

5. Economic Development
   a. Support the economic development missions of the university and the college through programs of education, research, outreach, ans service.
   b. Support the educational and research needs of state agencies and private entities though development and support of distance education and comprehensive research facilities.
   c. Promote and develop a level of endowment for the department that provides significant and stable financial resources to augment the funding allocated to the department from the state appropriation to the university, other university and college resources, and the donations to the department by alumni, faculty, friends, and corporations.