Civil and Environmental Engineering

Department Head: Dr. Dennis D. Truax Graduate Coordinator: Dr. James Martin

235 Walker Hall Box 9546

Mississippi State, MS 39762 Telephone: 662-325-3050

E-mail: grad-coordinator@cee.msstate.edu Website: http://www.cee.msstate.edu

The Civil and Environmental Engineering Department offers graduate study leading to degrees of Master of Science in Civil Engineering and Doctor of Philosophy in Engineering with a Civil Engineering concentration. Both the M.S. and Ph.D. are available via the BCoE Graduate Distance Learning (online) program. Major areas of study are include the following.

- Construction engineering and management
- · Construction materials engineering
- · Environmental engineering
- · Geotechnical engineering
- · Structural engineering
- · Transportation engineering
- · Water resources engineering

The Kelly Gene Cook, Sr. Civil and Environmental Engineering Laboratories include research capabilities in the following areas.

- · Construction materials evaluation
- · Environmental analysis of water and soils
- · Structural systems analysis
- · Geotechnical materials evaluation
- · Structural systems analysis
- · Transportation system modeling
- · Water resources characterization

Space is also available for bench-scale and pilot-scale experimentation. Graduate assistantships are supported through sponsored research, instructional support and teaching assignments, and other departmental resources when available from the University, the Bagley College of Engineering, and the Department.

For information about the graduate program contact: Graduate Coordinator (p. 1).

Admission Criteria

Prerequisites for regular admission into Civil Engineering and Environmental Engineering's graduate program include all of the general requirements of the Office of the Graduate School. The minimum GPA for admission into the Civil and Environmental Engineering graduate program is 3.00 on a 4.00 scale as computed for courses that comprise the last two academic years of the qualifying undergraduate degree. Graduates of programs not accredited by the Engineering Accreditation Commission of ABET (www.ABET.org (http://www.abet.org)) must submit acceptable GRE scores (verbal and quantitative). International students are required to have a minimum Test of English as a Foreign Language (TOEFL) score of 550 PBT (79 iBT) or an International English Language Testing Systems (IELTS) score of 6.5. Students must possess core competency in the sub-discipline in which they will focus their graduate studies. Applicants who do not meet the requirements for regular admission may be considered for contingent or provisional admission at the discretion of the department.

Contingent Admission

Applicants meeting University requirements for admission but failing to meet the department's requirements for regular admission may be considered for contingent admission. Applicants with a Civil Engineering undergraduate degree or appropriate undergraduate degree in other engineering disciplines, mathematics. or science who have an undergraduate GPA between 2.75 to 3.00 may be admitted on contingent status provided they satisfy the TOEFL/IELTS criteria. Undergraduate remedial courses will be taken for no credit and a grade of B or better is required. To be admitted under a contingent status a GRE score is required. The GRE score must be competitive, as determined by the applicant's sub-discipline selection committee. Students meeting the other requirements but with TOEFL/IELTS scores below the department minimum may be admitted on a contingent status but must satisfy the English as a Second Language (ESL) course requirement(s) as specified in the *Graduate Catalog*.

Provisional Admission

Applicants failing to meet the GPA undergraduate minimum grade point average (3.00) may be admitted to the degree program on provisional status if approved by the graduate coordinator. The minimum acceptable undergraduate GPA for admission as a provisional student is 2.50 on a 4.00 scale when computed for courses that comprise the last two academic years of the degree program. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student shall be dismissed from the graduate program. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance

A student in the Civil and Environmental Engineering graduate program is expected to maintain satisfactory performance in each class, overall grade point average, and all assignments related to assistantships, if applicable. A student with a U grade is placed on academic probation. A second U grade may lead to dismissal from the program. A student may be dismissed from the program for grades of D, F, or two grades below B. Failure to maintain a 3.00 grade point average after admission to the program is also basis for dismissal. Dismissal may occur if a student fails to meet satisfactory performance requirements, such as research progress, satisfactory results of written or oral examinations, and thesis or dissertation or research defense. The student will be advised in writing of their dismissal and justification for the action in a written letter of notification. To appeal a dismissal from the department's graduate program, the student must submit within thirty days of the date of the letter of notification a written petition for reconsideration memorandum to the department's graduate coordinator providing justification as to why the dismissal should be reversed.

Master of Science in Civil Engineering - Thesis

Total Hours		30
CE 8000	Thesis Research/ Thesis in Civil & Environmental Engineering	6
Additional graduate coursework		12
7000-, 8000-, and/or 9000-level coursewor	k	12

The student, in coordination with his or her graduate committee, must develop a program of study which may include courses from other engineering disciplines, mathematics, the physical sciences, and business administration. Specifically, the program of study must include:

- minimum 15 hours of coursework in engineering;
- minimum 12 hours of coursework in the department with at least 9 hours at the upper graduate level;
- a minimum of half the coursework on the program of study at the 8000 level or above; and
- all graduate core curriculum requirements within the student's sub-discipline.

The program of study is also limited to:

- a maximum of 6 hours of coursework in business management;
- a maximum of 6 hours of CE 7000 as part of the minimum 24 hours of coursework;
- · a maximum of 9 hours of graduate coursework received as an unclassified graduate student; and
- a maximum of 9 hours of graduate credit transferred from other institutions.

Students are expected to receive grades of B or better in each course used to satisfy the minimum graduate credit coursework requirement.

Master of Science in Civil Engineering - Non-Thesis

7000-, 8000-, and/or 9000-level coursework	15
Additional graduate coursework	18
Total Hours	33

The student, in coordination with his or her graduate committee, must develop a program of study which may include courses from other engineering disciplines, mathematics, the physical sciences and business administration. Specifically, the program of study must include:

- a minimum of 18 hours of coursework in the department with at least 12 hours at the upper graduate level;
- a minimum of 15 hours of coursework on the program of study at the 8000 level or above; and
- all graduate core curriculum requirements within the student's sub-discipline.

The program of study is also limited to:

- · a maximum of 6 hours of coursework in business management;
- · a maximum of 6 hours of CE 7000 as part of the minimum 33 hours of coursework;

- a maximum of 9 hours of graduate coursework received as an unclassified graduate student; and
- a maximum of 9 hours of graduate credit transferred from other institutions.

Students are expected to receive grades of B or better in each course used to satisfy the minimum graduate credit coursework requirements.

Doctor of Philosophy in Engineering with Civil Engineering Concentration

Doctoral students must complete a minimum of the equivalent of three academic years of applicable coursework beyond the bachelor's degree (interpreted as 75 credit hours beyond a bachelor's degree or 45 hours beyond a master's degree). A minimum of 20 hours of dissertation research is included. The doctoral student will be required to conduct research on an approved topic and prepare and successfully defend a dissertation.