



# SCHOOL OF ENGINEERING

Overview

Academics & Admissions

**Departments** 

**Programs** 

**Minors** 

Courses

Faculty

**Awards** 

## Leadership

- · Alexander H D Cheng DEAN OF ENGINEERING AND PROFESSOR OF CIVIL ENGINEERING
- James G Vaughan INTERIM DIRECTOR OF THE CENTER FOR MANUFACTURING EXCELLENCE AND FAP BARNARD DISTINGUISHED PROFESSOR OF MECHANICAL ENGINEERING

### Contact

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http://www.olemiss.edu/depts/engineering\_school/

### Overview

The School of Engineering offers Bachelor of Science (B.S.) degrees in chemical engineering, civil engineering, computer science, electrical engineering, geology, and geological engineering, mechanical engineering, and a Bachelor of Engineering (B.E.) degree.

## History/Mission/Purpose

History - Founded in 1900, the School of Engineering is the third oldest school of the university and is the oldest engineering school in the state. Instruction in engineering dates from 1854 when a Department of Engineering was established by the Board of Trustees to complement a strong program in the natural sciences.

Vision Statement - The School of Engineering at the University of Mississippi will be recognized among the best engineering schools in the South. Mission Statement - The School of Engineering at the University of Mississippi strives to continuously improve the quality of teaching, research and service. In so doing, the School

- Prepares students with a broad based education for entering the engineering profession, for advanced studies, and for careers in research;
- Develops in students leadership skills, communication and creative thinking skills, global perspective, and commitment to lifelong learning; and
- Provides practicing professionals with continuing education opportunities.

The School capitalizes on its engineering science tradition, its low student to faculty ratio, and the liberal arts environment of the University of Mississippi to give our graduates the abilities to adapt to the rapid changes in engineering and to give our graduates the interdisciplinary background and capacity for innovation that sets them apart from the graduates of larger engineering schools.

#### Statement of Goals

- To provide an environment conducive to learning, teaching, and research. This includes a diverse and multicultural first-rate faculty, staff and students and state-of-the-art facilities.
- To provide a top-quality ABET accredited undergraduate program suitable for the 21st century.
- To foster a vibrant graduate program and perform quality research in line with national trends and achieve national recognition in selected areas.
- To establish strong partnerships and lasting relationships with industry, government, professional societies, alumni and academia.
- To make significant contribution to the technological and economic development of the State of Mississippi and the region through education, research,
- · To increase the visibility of the School of Engineering locally and nationally.

## Accreditation

The Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700, has accredited the Bachelor of Science curricula in chemical, civil, electrical, geological, and mechanical engineering. The Bachelor of Science in Computer Science degree is accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone: 410-347-7700. The school and its component departments are members of the Engineering College Administrative Council and the Engineering College Research Council. The school has student chapters of the American Institute of Aeronautics and Astronautics, the American Society of Civil Engineers, the American Institute of Chemical Engineers, the American Society of Mechanical Engineers, the Association for Computing Machinery, the Institute of Electrical and Electronic Engineers, Tau Beta Pi, the engineering national honorary fraternity, National Society of Black Engineers, and the Institute of Transportation Engineers.

## Other Information

Cooperative Education Program - Qualified students in the school may participate in the Cooperative Education Program. Co-op integrates theory and practice by blending classroom learning with practical work experience. The Engineering Dean's Office and the university's Career Center work closely



### SCHOOL OF ENGINEERING | Spring 2009-10

227 Brevard Hall, University, MS 38677





together to identify co-op opportunities for interested students. The School of Engineering Web site includes a partial listing of interested corporate co-op partners.

## Record of Graduates

Procedures and techniques used to obtain information regarding positions initially accepted by graduates: Different procedures are employed by the different departments in obtaining this information. The Department of Chemical Engineering uses a straightforward, one-page questionnaire for this purpose. The departments of Civil and Mechanical Engineering write a letter to recent graduates asking them to provide information on their employer (or graduate school), as well as on their educational experience in the School of Engineering.

How data are compiled concerning the professional advancement of graduates: The Department of Civil Engineering has developed a one-page employer questionnaire to be sent to the graduate's employer and completed by the graduate's immediate supervisor. The chemical engineering questionnaire described above also provides some data of this nature for that program. Also, the response to the letters written to civil and mechanical engineering, described above, provides some data on professional advancement for graduates of those programs.

How the opinions of graduates regarding their educational program are taken into account: The University of Mississippi Graduating Student Survey is administered at each graduation period (August, December, and May). Students are given survey forms when they pick up graduation applications and asked to submit the completed form. Results are compiled and forwarded to the different departments annually. The survey is comprehensive, having a scale of opinions from strongly agree to strongly disagree and from very satisfied to very unsatisfied, covering a broad range of educational program concerns

The concerns and opinions of students graduating from the different engineering programs that are highlighted by the above survey are considered by the faculty an important input into the continuing process of curriculum assessment. Additionally, input from graduates through their response to questionnaires and letters of inquiry is factored into the active assessment policies of the individual departments. Also, the chairs of the departments of Electrical and Mechanical Engineering conduct informal exit interviews with graduating seniors to solicit suggestions for undergraduate program improvements. Placement and salary surveys: The University Office of Career Service and Placement maintains records on all graduates. These records include employer, and in some cases, salary information. Some of the engineering departments have developed salary surveys in order to establish a database, primarily for undergraduate student recruitment purposes.

Fundamentals of Engineering examinations: The departments of Chemical, Civil, Electrical, and Geological Engineering require all students in those programs to take the Fundamentals of Engineering examination prior to the awarding of the baccalaureate degree, but they are not required to pass it. The Department of Mechanical Engineering does not have this requirement but strongly encourages the mechanical engineering students to take the examination. Categorical results from these examinations are used to assess the program curricula with regard to meeting EAC/ABET standards.

Performance on Graduate Record Examination: Presently, a vehicle is not in place for determining the performance of graduates of the different engineering programs on the Graduate Record Examination (GRE). For graduates who attend graduate school at The University of Mississippi, this information is directly available, since both general and subject examinations are required. However, due to the widely ranging requirements of the different graduate schools throughout the country with regard to the GRE, this information is not readily obtainable.

Admissions records of graduates entering postgraduate study: Accurate records are kept on those graduates of all the engineering programs who enroll in graduate school by each of the individual departments. Information with regard to applications that are rejected, however, is not available and cannot be obtained except in cases where the graduate volunteers it.

