Welcome to the Civil Engineering Department. This handbook has been prepared to help you over some of the hurdles you will encounter on your way to your goal of a Bachelor of Science degree in civil engineering.

This is a guide for civil engineering students and is not intended to be a substitute for The University of Memphis Student Handbook or the Undergraduate Catalog. You are encouraged to read both of these.
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INTRODUCTION

The profession of civil engineering

Civil engineering is the oldest branch of engineering. The Roman aqueducts and the pyramids of Egypt are early examples of civil engineering works. Originally, the name "civil" was used to distinguish this type of "civilian" project from those done for the military.

Today, civil engineering encompasses a wide range of projects and activities for the welfare and safety of the general public. Civil engineers are responsible for the planning, design, and construction of such projects as bridges, buildings, highways, traffic control systems, and facilities for the treatment of water supplies and waste water. Civil engineers are also involved in solving the problems of hazardous waste and air pollution.

Specialized areas within the discipline of civil engineering include structural engineering, construction engineering, transportation engineering, environmental engineering, water resources engineering, and foundation engineering (also known as geotechnical engineering). Civil engineers are also active in such diverse fields as urban planning and aerospace engineering.

Career opportunities

The broad background provided by a civil engineering education is preparation for a wide range of careers. In addition to the traditional areas of civil engineering such as structural design, construction, and environmental engineering, men and women trained as civil engineers can be found in the aerospace industry, the computer industry, and almost every field of endeavor in both government and the private sector.

Civil engineers can work as planners, designers, or both. Some work in sales, and many experienced engineers are in management positions. Many civil engineers who have established a reputation in their specialty form their own engineering consulting firms. Civil engineering is a profession that provides excellent opportunities for having your own company.

The civil engineering program at The University of Memphis

The first undergraduate class of just four civil engineering students graduated from The University of Memphis in the Spring of 1969. The first engineering classes were held in classrooms in the College of Education. In 1971, the College of Engineering moved into its present complex of three buildings. Most of the Civil Engineering Department classrooms, laboratories, and faculty offices are located in the Engineering Science Building at the corner of Central Avenue and Zack Curlin Street (named after a former football coach). Some of the laboratories and computer facilities are located in the Engineering Technology wing. The administrative wing of the engineering complex houses the Dean’s Office, the Co-op office, the college Academic Adviser, the Ground Water Institute, and a student lounge.

The civil engineering program is designed to equip students with the knowledge and skills required to identify and solve the technical problems of society in a practical and ethical way. The program objectives are to 1) produce civil engineers who can assume technical and managerial leadership roles in the planning, design, construction, operation, and maintenance of our nation’s infrastructure; 2) provide lifelong learning opportunities for civil engineering practitioners in the region; and 3) assist local gov-
ernment and industry in the solution of their technical problems while providing practical experience for our students. The civil engineering program is greatly enhanced by a diverse student body spanning a wide range of ages, backgrounds, and nationalities.

The civil engineering program of study provides an integrated educational experience that combines study in basic and engineering science, the humanities, and the social sciences. Practical experience is gained through laboratory experimentation, problem solving, and engineering design. Students may pursue a general course of study or may elect to specialize in environmental, structural, foundation, transportation, water resources, or construction engineering.

DEPARTMENTAL GOALS AND OBJECTIVES

Mission Statement

Civil Engineering is a profession that has a long and distinguished tradition of improving the quality of life for humanity. The mission of the Department of Civil Engineering at the University of Memphis is to perpetuate this noble tradition through quality education, research, and public service.

Program Educational Objectives

Program Education Objectives are statements that describe the expected accomplishments of graduates during the first several years following graduation from the Civil Engineering program at the University of Memphis.

The University Of Memphis Department Of Civil Engineering’s undergraduate program offers a Bachelor’s of Science in Civil Engineering degree, and our faculty is committed to teaching, inspiring, and mentoring students who will meet the following objectives:

1. Our graduates will meet or exceed the expectations of civil engineering employers in industry, private practice/consultation, and/or government service.
2. Our graduates will effectively interface with other engineers, professionals from other disciplines, and the public to solve civil engineering problems.
3. Our graduates will achieve success in earning advanced degrees, both in engineering and other professional fields when pursued.
4. Our graduates will engage in a broad range of self-development activities that benefit the civil engineering profession and the community.

Program Outcomes

Program Outcomes focus on those abilities that are measurable at the successful end of a student’s academic program in Civil Engineering at the University of Memphis.

1. Graduates will compete successfully for positions at the regional, state, national, and international levels.
2. Graduates will demonstrate application of solid foundation skills in mathematics, basic and engineering sciences, current computer applications, and experimental techniques necessary to solve civil engineering problems in the planning, design, and construction of infrastructure projects.

3. Graduates will demonstrate teamwork and communications skills necessary to perform effectively as professional civil engineers.

4. Graduates will demonstrate sufficient background knowledge of math, science, and engineering skills to pursue graduate studies in engineering and related disciplines.

5. Graduates will demonstrate an awareness of the need to stay abreast of the latest knowledge in civil engineering and to continue professional development through the processes of lifelong learning and/or graduate study.

6. Graduates will display an awareness of the importance of ethics, professional responsibility and contemporary issues relating to the practice of civil engineering.

7. Graduates will actively promote interest and awareness of our Civil Engineering Department and the Herff College of Engineering to promote the field of civil engineering.

**Performance Skills and Abilities**

Performance Skills and Abilities are emphasized throughout the 4-year undergraduate program in order to prepare students to be successful engineers and to meet Department Program Outcomes.

1. Ability to use knowledge of math, science, and engineering principles in analysis of civil engineering problems.

2. Ability to design and conduct experiments and analyze and interpret data relevant to civil engineering.

3. Ability to effectively identify problems in structural, environmental, geotechnical, transportation, and/or water resources engineering, and to provide relevant design alternatives to solve these problems.

4. Ability to work within a multidisciplinary team to solve engineering problems.

5. Ability to use current software packages and other modern engineering tools in civil engineering analysis and design.

6. Ability to prepare high quality engineering reports and to make effective oral presentations to a variety of audiences representing technical and non-technical backgrounds.

7. Ability to consider political, social, economic, and environmental constraints to solve civil engineering problems in a professional and ethical manner.

**CURRICULUM**

The civil engineering program at The University of Memphis is based on a solid foundation of mathematics and science. Four semesters of calculus, one of chemistry, two of physics, and one selected from chemistry, biology, and geology are required. In addition, four semesters of English and a variety of courses in the humanities and social sciences must be completed. Most of these studies are completed in the first two years, leaving the last two years of the program for engineering course work, including both
required and elective courses. It is through these elective courses that you may specialize in a particular branch of civil engineering, although such specialization is not required. In addition to the structured elective courses, you may enroll in Civil Engineering Projects, a course in which you may explore a topic in greater depth through independent study.

Although most engineering courses are taken in the junior and senior years, some are scheduled for each semester of the freshman and sophomore years. These include one civil engineering course each of the first four semesters, along with some of the courses from other engineering departments that civil engineering students are required to take.

The civil engineering curriculum has been planned to conform to the General Education requirements of The University of Memphis. The goal of these requirements, which apply to students of all majors, is to introduce students to ideas and traditions that will make them broadly educated, as opposed to being narrow specialists.

All engineering programs at The University of Memphis are reviewed at regular intervals by the Accrediting Board for Engineering and Technology (ABET). Many factors are involved in this intensive evaluation, including the curriculum, facilities, qualifications of the faculty, and performance of the students. The civil engineering program is fully accredited and has maintained its accreditation ever since the first evaluation visit by ABET.

The complete four-year curriculum is shown on the following page.
# Curriculum for Bachelor of Science Degree in

## CIVIL ENGINEERING

### Fall, 2005

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<tr>
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| Physical Science | 4         |

**Semester Totals**  
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<td>CIVL 3325</td>
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<td>CIVL 3131 or 4135</td>
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<td>CIVL 3137</td>
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<td>CIVL 3140</td>
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**Semester Totals**  
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**Semester Totals**  
16  
12

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1. Select from CHEM 1120/1121, BIOL 1110/1111, and GEOL 1040 or 1103.
2. Either CIVL 3131 or 4135 may be taken as a required course. The other may be taken as a Group 2 elective.
3. Upper division courses in civil engineering to be selected from an approved list. Advisor's approval required.
SUMMARY OF ELECTIVE REQUIREMENTS

1. **Physical Science.** Choose one of the following:

   CHEM 1121/1120, BIOL 1110/1111, GEOL 1040, or GEOL 1103

2. **Gen. Ed. - Social Science** (6 hours) Choose any two of the following:

   ANTH 1100, ANTH 1200, ECON 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 1301, POLS 1501, PSYC 1200, PSYC 3510, SOCI 1111, SOCI 2100, SOCI 2101/CSED 2101, UNIV 2304

3. **Gen. Ed. - Humanities/Fine Arts.** Choose any two of the following:

   ART 1030, CLAS 2481, COMM 1851, DANC 1151, HIST 1110, HIST 1120, MUS 1030, PHIL 1101, PHIL 1102, POLS 1101, POLS 1102, THEA 1030, UNIV 2850, UNIV 3580, UNIV 3581

4. **Civil Engineering Electives:** Four courses are required. Two must be chosen from Group 2. The other two can be chosen from either Group 1 or Group 2.

   **Group 1.**
   
   CIVL 4122  Structural Analysis II
   CIVL 4171  Construction Engineering I
   CIVL 4172  Construction Engineering II
   TECHNICAL ELECTIVE: Approved upper-division engineering course

   **Group 2.**
   
   CIVL 3131  Design of Steel Structures
   (unless taken as a required course)
   CIVL 4131  Intermediate Steel Design
   CIVL 4135  Reinforced Concrete Design
   (unless taken as a required course)
   CIVL 4136  Intermediate Reinforced Concrete Design
   CIVL 4140  Environmental Engineering Design
   CIVL 4143  Physical/Chemical Treatment Systems
   CIVL 4144  Biological Wastewater Treatment Systems
   CIVL 4149  Pump Station Design
   CIVL 4152  Applied Soil Mechanics
   CIVL 4162  Traffic Engineering
   CIVL 4163  Airport Planning and Design
   CIVL 4164  Route Location and Design
   CIVL 4180  Advanced Hydrology and Hydraulics
   CIVL 4190  Water Resources Planning and Design
   CIVL 4191  Civil Engineering Projects
   CIVL 4900  Special Topics in Civil Engineering
ACADEMIC REQUIREMENTS

Academic advising:

When you declare civil engineering as your major, you will be assigned an advisor from the civil engineering faculty. If you have already selected an area to specialize in, such as structural engineering, someone in that specialty will usually be your advisor. It is extremely important to see your advisor during the advising period before registration each semester so that you can enroll in the courses that are best for your particular circumstances. Because of prerequisites, missing out on the right course at the right time could delay your graduation.

If you experience difficulties during the semester, you should see your advisor to explore your options, such as dropping a course.

If for some reason you wish to change advisors, see the department chairman, and it will be taken care of.

University of Memphis academic requirements:

In order to be classified as a student in good standing with the University, you must maintain a certain quality point average (QPA). To compute your QPA, multiply the number of credit hours earned in a course by a certain factor, add up the products for all courses, then divide by the total number of credit hours attempted. The factors are: 4.0 for a grade of A, 3.0 for a B, 2.0 for a C, 1.0 for a D, and 0 for an F. The minimum QPA for good standing depends upon the number of semester hours attempted. This is shown in the following table:

<table>
<thead>
<tr>
<th>Hours Attempted</th>
<th>Minimum QPA</th>
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<tbody>
<tr>
<td>14.99 or less</td>
<td>No minimum</td>
</tr>
<tr>
<td>15.00-29.99</td>
<td>1.40</td>
</tr>
<tr>
<td>30.00-50.99</td>
<td>1.70</td>
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<tr>
<td>51.00-67.99</td>
<td>1.90</td>
</tr>
<tr>
<td>68 and above</td>
<td>2.00</td>
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</tbody>
</table>

If you fall below the minimum, you are placed on probation. If you fail to bring your QPA up to the minimum the following semester, you are suspended for one semester. For more details, see the Undergraduate Catalog.

A cumulative quality point average of 2.0 is required for graduation.

Department of Civil Engineering academic requirements:

In addition to the above requirements, students in civil engineering must earn a grade of C or higher in all civil engineering courses. In addition, a minimum grade of C must be earned in all civil engineering courses that are prerequisites for other civil engineering courses before taking those courses. (With certain restrictions, courses may be repeated in order to obtain a higher grade.)

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1 Some instructors may choose to use the optional plus/minus grading system. See the Undergraduate Catalog for details.
**Getting help with course work:**

You will probably find engineering studies very different from your high school work, and even different from courses in other departments in the university. You will find that you need to keep up with your assignments and not get behind. Homework is assigned in most courses, and you will need to devote much time to it. In most cases, if you do not do the homework, you will not perform well on examinations. Prepare to spend a lot of time on homework.

Many students find that they need to hold part-time jobs in order to make ends meet. Regardless of your financial needs, the reality is that you will find it very difficult to succeed academically if you do not devote the proper amount of time to your studies. If you must work, you should reduce your course load accordingly. Studies of drop-outs show that most students who work more than 10 hours per week cannot successfully carry a full academic load.

Even if you devote the proper amount of time to study, you may need help. Assistance is available from several sources:

1. Other students. Sometimes there are benefits to be gained from working with other students, provided that each student contributes to the effort. A word of caution: do not work so closely together that the results could be considered copying.

2. Your teacher. Faculty members maintain posted office hours during which time they are available to help you with your work. Don't be bashful -- if the instructor feels like your problem is something you need to work out by yourself, he or she will tell you -- but make a serious attempt to solve the problem before you seek help.

3. Tutors. The University of Memphis administers a tutoring service to help students with most of their courses, including engineering courses. Tutoring for engineering courses is provided in the engineering complex. There is no charge for this service.
ORGANIZATIONS FOR CIVIL ENGINEERING STUDENTS

Technical societies of direct interest to civil engineering students are the student chapters of the American Society of Civil Engineers (ASCE), the Institute of Transportation Engineers (ITE), the Society of Women Engineers (SWE), the National Society of Black Engineers (NSBE), and the honor society Tau Beta Pi.

To become a member or to obtain more information on any of these organizations, attend a meeting. Look for meeting notices on the bulletin boards in the engineering complex.

American Society of Civil Engineers:

This student-run organization is affiliated with the local chapter of this national professional society. Only those civil engineering departments that are fully accredited by ABET are sanctioned by ASCE to have a student chapter. Membership is open to all civil engineering students, including freshmen. Benefits include both professional and social activities. The highlight of the year is the regional conference, hosted by a different university each year. The conference includes social activities and various competitions, such as concrete canoe races, with canoes designed and constructed by each of the participating student chapters. You are encouraged to become a member of ASCE.

Institute of Transportation Engineers:

The purpose of the ITE student chapter is to promote the advancement of transportation and traffic engineering by fostering close association of students with the transportation and traffic engineering profession and the Institute, to acquaint students with topics of interest in transportation and traffic engineering through the medium of competent speakers and of Chapter-sponsored trips, to foster the development of professional spirit, to promote common interests among students, and to encourage the expansion of facilities for transportation and traffic engineering study.

Society of Women Engineers:

This is a national society for women in all engineering fields and is organized to address the special concerns of women engineers.

National Society of Black Engineers:

This is another national society, formed to be responsive to the concerns of African-American engineers in all engineering disciplines.

Tau Beta Pi:

This is a national honor society for engineers. It is the oldest of the engineering honor societies, and membership is granted to a select few who have distinguished themselves academically. It is truly an honor to be selected, and membership is a goal worth striving for.
What courses to take when:

This handbook, on page 3, shows the courses in the sequence in which you should schedule them. Any deviation from this schedule should be worked out with your civil engineering faculty advisor. As mentioned earlier, it is very important that you see your advisor prior to registration each semester.

Registration:

At the University of Memphis, students register for classes through the university's web page ("Tiger Web"). Most registration problems can be avoided by doing two things:

1. See your advisor.
2. Register at your designated time.

Each semester, an Academic Calendar for the next semester is published. This schedule will give the dates when you may register for the next semester.

You should ask your advisor to help you select alternate courses to sign up for in case the classes you want are filled.

How to change your schedule:

After you have registered, and during the regular registration period, you may add courses (if they are available) or drop courses without paying a fee.

Once the semester begins, you have approximately one week in which to add courses to your schedule. The deadline for dropping a course is much later. See the official Academic Calendar for those dates.

Dropping a course:

If you decide to drop a course after classes have begun, you should do it as soon as possible so that you can devote more time to your other courses. It is extremely important that you follow all the necessary procedures to officially drop the course before the published drop date. Otherwise, if you simply quit going to class, you will receive a grade of F.
TRANSFER STUDENTS

When you transfer to The University of Memphis from another college or university, your records from your previous school will be reviewed by the Transfer Affairs department of the Records Office. They will determine which courses are equivalent to University of Memphis courses. The department chair will review this evaluation and determine which additional courses you must take in order to complete the requirements for a B.S. degree in civil engineering. Regardless of this evaluation, there are certain policies that apply to all transfer students:

1. You will not be given credit for any English composition courses with a grade of less than C.

2. You will not be given credit for any Civil Engineering courses with a grade of less than C.

3. Regardless of how many courses you receive transfer credit for, you must complete, at The University of Memphis, at least 25 percent of the credit hours required for the degree. In addition, 31 of the final 62 semester hours that are required for your degree must be completed at The University of Memphis. In the college of engineering, this means that you must earn at least 31 hours in upper-division engineering courses.

4. If you transfer from a two-year institution, you must complete at least 60 semester hours at The University of Memphis.

Transfer credit for courses taken elsewhere after enrolling at The University of Memphis:

If you are already a student at The University of Memphis and wish to take a course somewhere else, this can usually be done, but you should get written approval ahead of time.
GRADUATION: WHAT MUST BE DONE DURING YOUR SENIOR YEAR

Application for graduation:

This should be filed with the department secretary during the semester before the one in which you graduate. If you plan to graduate in December, the application should be filed during the summer term. See the Academic Calendar for the exact dates.

General Education Test:

This examination must be taken by all students in the University before they graduate. This is a general education examination, not directly related to your major. You cannot graduate until you have taken this examination. There are no exceptions. The exam schedule is given in the Academic Calendar.

The FE Exam: becoming a registered Professional Engineer:

In order to practice engineering as a professional, you must be licensed by the state in which you practice, in much the same way as a physician must be licensed. Although you may work under the supervision of a registered Professional Engineer (PE) without being registered, you may not sign engineering reports or plans. Any engineer who aspires to advance to positions of authority and responsibility should seek to become registered at the earliest possible time after graduation.

To become registered, you must pass a two-day written examination after a suitable period of experience. The first day is a test on engineering fundamentals, and the second day test is on the practice of engineering. Each state permits seniors in engineering schools to take the first day examination on fundamentals of engineering, commonly referred to as the FE exam. This is a national examination and is the same in every state. Passing this exam entitles you to use the title "Engineering Intern." After the appropriate period of experience (usually four years), you need only take and pass the practice of engineering portion of the exam to become a registered Professional Engineer.

You are strongly encouraged to take the FE exam and eventually become a PE. An FE review course is given each semester in the Herff College of Engineering.

Life after graduation:

Most graduates will either begin working as engineers or attend graduate school to obtain an advanced degree.

If you plan to work, there are several approaches to finding a suitable job. The University of Memphis Career & Employment Services Office can schedule interviews with various private companies and government agencies that hire graduates in your field. You are urged to take advantage of this service. In addition, some employers contact the Civil Engineering Department directly, and seniors are informed of these opportunities. Your advisor may also be able to help you find a suitable engineering position.

If you decide to gain more depth in an area of specialization, you may want to attend graduate school and obtain a Master of Science degree (M.S.) or a Doctor of Philosophy degree (Ph.D.). If you eventually want to teach or do research at a university, you will definitely want to earn a Ph.D. degree, either at The University of Memphis or elsewhere. You need to make this decision early in your senior year so that you have enough time to satisfy all of the admission requirements for the graduate school of your choice. Most schools require that you take and pass the Graduate Record Examination. This exam is
given at The University of Memphis each semester. See the Graduate Catalog for details. In some cases, qualified students can obtain graduate assistantships at the university they attend. These are usually classified as teaching assistantships or research assistantships. In addition to a stipend, some assistantships include a waiver of tuition.

SCHOLARSHIPS AND AWARDS FOR CIVIL ENGINEERING STUDENTS

Scholarships for civil engineering students:

The Undergraduate Catalog lists scholarships that are available to all students in the university and those for engineering students only. In addition, certain scholarships are designed specifically for civil engineering students at The University of Memphis:

1. Tennessee Road Builders Association Scholarship  (5 per year)
2. Associated General Contractors Scholarship  (5-10 per year)
3. Pickering Memorial Scholarship  (1 per year)
4. Joe Rutherford Memorial Scholarship  (1 per year)
5. Don Farley Memorial Scholarship  (1 per year)
6. Maxwell F. McDade, Sr. Scholarship  (1 per year)
7. Richard E. Whitmore Scholarship  (1 per year)

These scholarships are administered by the Department of Civil Engineering and are available only to civil engineering students at The University of Memphis.

Some organizations award scholarships to civil engineering students on the basis of national or regional competition. They include the following:

1. Associated General Contractors (The Bruce Tucker Memorial Scholarship)
2. The American Society of Civil Engineers
3. KY/TN Water Environment Association
4. Tennessee Section, Institute of Transportation Engineers
5. National Association of Women in Construction (NAWIC)
6. American Institute of Steel Construction
7. Structural Engineers Foundation

Information on these and other scholarships that may become available will be posted on the bulletin board outside the Civil Engineering Department Office. If you have any questions about scholarships, see the department chairman.
Awards for civil engineering seniors:

As a means of recognizing those students who have excelled academically or in other ways, the Department of Civil Engineering each year selects a student for each of the following awards:

F. H. Kellogg Award. This award is named for the first dean of the Herff College of Engineering. Dr. Kellogg also served as a member of the Civil Engineering faculty. The recipient of this award is selected by a vote of the faculty.

Thomas S. Fry Academic Achievement Award. This award is given to the graduating senior with the highest grade point average. The award is named in honor of Dr. Fry, who was the first chairman of the department, in recognition of his dedication to teaching and academic excellence. Dr. Fry was a member of the civil engineering faculty for 34 years before his death in 2003.

T. S. Wu Senior Design Award. Dr. Wu, who retired in 1989, was one of the original faculty members of the Herff College of Engineering when it was formed. This award is presented to the civil engineering senior who has completed an outstanding design project in the senior design course and has demonstrated design ability during his or her academic career.

FACULTY

Duties of the faculty:

In addition to teaching, members of the faculty serve on committees at the University level, the College level, and the Department level. These committees are concerned with such things as curriculum, scholarships, laboratory equipment, computer facilities, tenure and promotion matters, and much more.

Many civil engineering faculty members are involved in research, writing, public service, continuing education, and other activities. Many are nationally recognized in their areas of expertise. Some are active in national professional organizations such as the American Society of Civil Engineers, serving on committees of vital importance to the profession. Many are called upon to participate in regional and national seminars and continuing education programs for professional engineers. Some are authors of engineering textbooks used at universities throughout the country. Some of our faculty members are engaged in engineering research projects funded by agencies outside the University, with grants exceeding one million dollars. These projects advance knowledge in various disciplines within civil engineering.

Office hours:

One of the duties of all faculty members is to post the office hours during which they will be available to meet with students. The following guidelines apply to faculty office hours:

1. Although teachers make every effort to be available during their office hours, sometimes circumstances beyond their control will make it impossible. If the President of the University calls and asks to see a faculty member, it is difficult to say no. If you need to leave messages or turn in assignments, you may give them to the Department secretary.

2. Generally speaking, the posted office hours are "walk-in." You do not need an appointment to see a faculty member during these posted office hours.
3. If you need to see a faculty member at a time outside of posted office hours, try to make an appointment. Just because a professor is in the office does not mean that he or she is free to help you (see "Duties of the faculty" above).

Biographical sketches of current faculty members:

Name: Martin E. Lipinski, Professor, Chairman

Email: mlipinsk@memphis.edu

First semester at The University of Memphis: Fall, 1975


Area of specialization: Transportation engineering

Name: Jerry L. Anderson, Associate Professor and Director of the Ground Water Institute

Email: jlandrsn@memphis.edu

First semester at The University of Memphis: Fall, 1972

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Area of specialization: Water resources engineering

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Area of specialization: Geotechnical Engineering

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Degrees: B.S.C.E., 1979, Virginia Tech; M.S.C.E., 1983, University of Colorado; Ph.D., 1995, Georgia Tech

Area of specialization: Geotechnical engineering

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Name: Larry W. Moore, Professor

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First semester at The University of Memphis: Fall, 1983

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Area of specialization: Structural engineering
Name: Anna Phillips, Instructor

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Area of specialization: Technical and professional writing

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First semester at The University of Memphis: Fall, 1968

Degrees: B.S.C.E., 1960, M.S., 1966, Ph.D., 1971, University of South Carolina

Area of specialization: Structural engineering

Name: O. E. Wheeler, Herff Professor of Structural Mechanics

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First semester at The University of Memphis: Summer, 1978

Degrees: B.E., 1954, Vanderbilt University; M.S.C.E., 1956, University of Missouri; Ph.D., 1966, Texas A & M University

Area of specialization: Structural engineering, computer applications

MISCELLANEOUS

Computer facilities:

University of Memphis engineering students have access to computers in a variety of ways. In addition to the computer labs open to all University of Memphis students, three rooms in the Engineering Technology Building contain computers for engineering student use. These rooms are "open labs" and are available to students on a regular daily basis. Specific hours of availability are posted at each location.

In addition to these College of Engineering computer labs, the Department of Civil Engineering has a structural engineering computer lab dedicated to structural analysis and design applications. This lab is located in Room 313 of the Engineering Science Building and contains seven networked computers.

Cooperative programs:

In a cooperative program, a student is employed by a firm that pays the student's education expenses. The program can operate in one of two ways: the student can work full-time for a certain period,
then go to school full-time for a period, or the student can work part-time while taking a reduced course load. While it will take longer to obtain a degree through a cooperative program, a student can gain valuable experience along the way.

A special Co-op Office has been established in the Herff College of Engineering to place students in contact with local industries and government organizations. If you are interested, the Director of the Cooperative Program can provide you with details. The Co-op Office is located in the administrative wing of the engineering complex.

**Part-time employment in the Department:**

Occasionally funds are available to hire undergraduate students to assist the faculty in various activities. See the department chairman for further information.

**Bulletin boards:**

To keep up with the latest information on scholarships, jobs, deadlines, etc., check the bulletin boards next to the Civil Engineering Office. Urgent notices are sometimes posted on the office window.

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The University reserves the right to cancel or alter any part of this Bulletin without notice (subject to the following):

The course offerings and requirements of The University of Memphis are continually under examination and revision. This Bulletin presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. The specific courses or activities constituting the degree requirements for any programs are subject to state contractual terms and does not constitute a contract between the student and The University of Memphis.

The University of Memphis reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions. Any fees, charges or costs, and all academic regulations set forth in this Bulletin are subject to change at any time, and all courses, programs, and activities described in this Bulletin are subject to cancellation or termination by The University of Memphis or the Tennessee Board of Regents at any time.

The University of Memphis provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the institution, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the student’s desire and ability to learn and the application of appropriate study techniques to any course or program. Thus, The University of Memphis must necessarily limit representation of student preparedness in any field of study to the competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion. (TBR 2:04:00:01)