



SCHOOL OF  
**ENGINEERING**

UNIVERSITY OF MISSISSIPPI | 1900

NEW STUDENT  
ORIENTATION  
2019-2020



Welcome to the School of Engineering at the University of Mississippi. Our school is over a century old and is proud of its heritage of excellence.

Engineering has been taught at the University of Mississippi since its founding in 1848. Our undergraduate curriculum has a long tradition of providing a firm grounding in engineering fundamentals and design, as well as a broad-based education drawing from the Ole Miss liberal arts tradition. Our faculty members are rigorously trained, and many have practical experience. They take teaching to heart as well as conduct advanced research. Many of our faculty members are nationally and internationally recognized, as evident by being elected fellows or other honorary positions in their respective fields. In recent years, both student enrollment and research funding have risen to an all-time high. However, the school still maintains its historical “small school” characteristic of being student-centered and student-friendly. We will continue to educate and touch students one at a time.

Being an engineering school in a liberal arts university, our graduates are well rounded, which enables them to a spectrum of career choices. Many of these graduates became leaders in their professions and communities. Quite a number of our graduates are successful in academia, becoming Chancellors or Presidents of universities and department heads. Their strong academic background led them to become Rhode Scholars, Fulbright Scholars, Guggenheim Fellows, and Goldwater Scholars. In governmental service, we find our graduates as director of NASA Kennedy Space Center, deputy director of Oak Ridge National Laboratory, Secretary of U.S. Senate, program manager at the National Science Foundation, chief engineer at Tennessee Valley Authority (TVA), and in many other leadership positions at NASA Marshall Space Flight Center, Federal Highway Administration, Army Aviation and Missile Research Development and Engineering Center, Corps of Engineers Research and Development Center, to mention just a few. And of course, many of them have founded their own businesses, or become CEO or top managers of national or international companies. The broad training they received from our school also has allowed many of them to successfully enter the professions of medicine and law.

We encourage you to explore the School of Engineering website, and to visit our campus and the charming city of Oxford, home of William Faulkner, Nobel laureate in literature, to experience for yourself the excellence of the School of Engineering and the University of Mississippi, a Great American Public University!

Sincerely,  
School of Engineering  
Leadership Team

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# About the School of Engineering



## Overview

The School of Engineering offers Bachelor of Science degree programs in Biomedical, Chemical, Civil, Computer Science, Geology/Geological Engineering, Electrical, and Mechanical Engineering as well as a Bachelor of Engineering degree.

## History

Founded in 1900, the School of Engineering is the third oldest school at 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 natural sciences.

## Mission Statement

The School of Engineering at the University of Mississippi strives continuously to improve the quality of teaching, research and service. In so doing, the school:

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

The school capitalizes on its engineering science tradition, its low student-to-faculty ratio and the liberal arts environment of UM 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.

# Office of the Dean

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William Panlener

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# Departments

## BIOMEDICAL ENGINEERING

Academic Director: Dwight Waddell, Ph.D.  
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Office Contact: Andrew Stapp  
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## CHEMICAL ENGINEERING

Chair: John O'Haver, Ph.D.  
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Office Contact: Anne Pringle  
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662-915-7023  
abpringl@olemiss.edu

## CIVIL ENGINEERING

Chair: Yacoub Najjar, Ph.D.  
106 Carrier Hall  
662-915-7191  
ymnajjar@olemiss.edu

Office Contact: Lynne Trusty  
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lmtrusty@olemiss.edu

## COMPUTER SCIENCE

Chair: Dawn Wilkins, Ph.D.  
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662-915-7309  
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Office Contact: Jennifer Vaughn  
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662-915-7396  
dept@cs.olemiss.edu

## ELECTRICAL ENGINEERING/ COMPUTER ENGINEERING

Chair: Ramanarayanan Viswanathan, Ph.D.  
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662-915-5353

Office Contact: Stefanie Delmastro  
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## GENERAL ENGINEERING

Director: Adam Smith, Ph.D.  
136 Anderson  
662-915-5350  
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Office Contact: Anne Pringle  
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## GEOLOGICAL ENGINEERING & GEOLOGY

Chair: Gregg R. Davidson, Ph.D.  
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Office Contact: Sherra Jones  
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## MECHANICAL ENGINEERING

Chair: A.M. Rajendran, Ph.D.  
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Office Contact: Janet McBride  
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jlmcbri@olemiss.edu

# Student Organizations

## HONOR SOCIETY & STUDENT BODY

### TAU BETA PI

(National Honor Society)

Adviser: Ellen Lackey, Ph.D.

662-915-5379

melackey@olemiss.edu

### ENGINEERING STUDENT BODY

(ESB)

Adviser: Ryan Upshaw

662-915-7007

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## CHEMICAL ENGINEERING

### AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

(AIChE)

Adviser: Brenda Prager, Ph.D.

662-915-2184

bhprager@olemiss.edu

## CIVIL ENGINEERING

### AMERICAN SOCIETY OF

### CIVIL ENGINEERING

(ASCE)

Adviser: Grace Rushing

662-915-7191

gemcmahe@olemiss.edu

### CHI EPSILON

(National Honor Society)

Adviser: Cris Surbeck, Ph.D.

662-915-5473

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## COMPUTER SCIENCE

### ASSOCIATION FOR

### COMPUTING MACHINERY

(ACM)

Adviser: Adam Jones, Ph.D.

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### UPSILON PI EPSILON

(National Honor Society)

Adviser: Joseph Carlisle

662-915-7784

jcarlis1@olemiss.edu

## ELECTRICAL ENGINEERING

### INSTITUTE OF ELECTRICAL

### & ELECTRONIC ENGINEERS

(IEEE)

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### ETA KAPPA NU

(National Honor Society)

Adviser: W. Elliot Hutchcraft, Ph.D.

662-915-6934

eweh@olemiss.edu



## GEOLOGICAL ENGINEERING & GEOLOGY

### AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS (AAPG)

Adviser: Louis Zachos, Ph.D.  
662-915-8827  
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### ASSOCIATION OF ENGINEERING GEOLOGISTS (AEG)

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### SIGMA GAMMA EPSILON (National Honor Society)

Adviser: Jennifer Gifford Ph.D.  
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## MECHANICAL ENGINEERING

### AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

Adviser: P.R. Mantena, Ph.D.  
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### SOCIETY OF AUTOMOTIVE ENGINEERS

Adviser: T. Pandya, Ph.D.  
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tspandya@olemiss.edu

## OTHER ORGANIZATIONS

### ENGINEERS WITHOUT BORDERS (EWB)

Adviser: Paul Scovazzo Ph.D.  
scovazzo@olemiss.edu

### SOCIETY OF WOMEN ENGINEERS (SWE)

Adviser: Elizabeth Ervin, Ph.D.  
eke@olemiss.edu

### NATIONAL SOCIETY OF BLACK ENGINEERS (NSBE)

Adviser: Tyrus McCarty, Ph.D.  
mccarty@olemiss.edu

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# Frequently Asked Questions

## How do I calculate my GPA?

Your grade-point average is a weighted number on a + / - grading scale.

A.....	4 points
A- .....	3.7 points
B+ .....	3.3 points
B .....	3 points
B- .....	2.7 points
C+ .....	2.3 points
C.....	2 points
C- .....	1.7 points
D .....	1 point
F .....	0 points

“Total Quality Points” can be found by multiplying credit hours by points earned for each class, and obtaining a sum. For example,

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MATH	261 = 3-hr credits,	B	
WRIT	101 = 3-hr credits,	A	<i>Total Quality Points: (3)(3) + (3)(4) + (3)(0)</i>
HIS	105 = 3-hr credits,	F	<i>+ (3)(3) + (1)(1) + (3)(4) = 43</i>
CHEM	105 = 3-hr credits,	B	<i>Credit Hours Attempted: 16</i>
CHEM	115 = 1-hr credit,	D	<i>GPA Calculation: 43 quality points / 16 hours = 2.68</i>
ENGR	100 = 3-hr credits,	A	

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## What is full-time status?

Enrollment in at least 12 credit hours and no more than 19 credit hours allows a student to achieve full-time status.

## How often will I meet with my advisor?

Every semester, a pre registration period allows each current student to meet with his or her advisor, plan the upcoming schedule, talk about academic progress and lift the advisor hold from the student’s account. It is imperative that students make an appointment with their advisor in a timely manner during advising week.

Advising for the spring semester begins at the end of October and goes through the beginning of November. Advising for the fall semester begins the end of March and goes through the beginning of April.



## How do I find out who my advisor is?

Soon after your initial orientation advising meeting, log into your myOleMiss account and under the “Academics” tab select “Advising” and then select “My Advisors”. Your advisor’s information will be available to you on this page. If you have questions about this or if an advisor’s name is not listed following orientation, please contact your department secretary.

## What are all names of the buildings on the engineering complex?

Anderson Hall.....home to EE, ChE, and General Engineering  
Brevard Hall .....home to Engineering Dean’s Office and research centers  
Carrier Hall .....home to CE, G/GE and ME  
Weir Hall.....home to CS  
Center for Manufacturing Excellence (CME)

## What classes are offered in winter session and summer session that will help me meet my degree requirements?

Log into your myOleMiss account, and under the “Academics” tab, select “Course Schedule.” You may then select the desired session and browse by department. Compare the offered course(s) to the courses listed on your Academic Worksheet. Keep in mind that the course(s) you want to take must meet corequisites and prerequisites. For further information, you may contact your adviser.



## Cooperative Education Program

A student desiring to participate in the School of Engineering Professional Practice Program (Cooperative Education) must obtain approval by his or her department chair. The three defined co-op work terms are Fall, Spring, and Full Summer. Students desiring to enroll in the program will be registered for C O P 300 and have an approved internship offer for a minimum of 37.5 hours per week. Enrollment status during a co-op work term is equivalent to a full academic load at the University of Mississippi. The Engineering Dean's office will administratively enroll engineering co-op students. The enrolled co-op student is considered full-time for insurance purposes and the deferment of loan repayment.

Students participating in a co-op work term must submit required documentation to the Engineering Dean's Office to remain in good standing.

*For more information contact:*

*Megan Miller*

*Career Planning Specialist*

*School of Engineering*

*218 Brevard Hall*

*megan2@olemiss.edu*

### Is co-op available in my degree program?

Yes. Co-op is available in all programs within the School of Engineering. And it is highly recommended for any student interested in obtaining experience in his or her field before graduating.

### Where can I get help with my resume for a co-op job or summer internship? What about when I graduate and look for a real job?

Students are encouraged to visit the School of Engineering's Career Planning Specialist (Brevard 218). The Career Planning Specialist and University Career Center can assist students in developing a resume and also help them with preparation for interviews for co-op, internships or full-time positions. Upon enrollment, all engineering students will be granted an account and will be required to register with the University of Mississippi Career Center, students will have access to post their resumes on the employment website and search for position openings as well. Students will also receive information about full time, internship and co-op positions via email from the School of Engineering Dean's Office and academic departments.



## Tutoring Services

School of Engineering is highly committed to help all students achieve their academic goals. Engineering, a perceived challenging field for many, requires work, ingenuity, passion, and persistence. Tutoring is available for a variety of STEM subjects. Free help – sessions and individual paid tutoring are offered through the program.

More information about the program and tutoring schedules can be found at:



Contact Information:  
Oana Najjar  
Academic Counselor  
204 Brevard Hall  
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# General Engineering

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- Pre-Med
  - Business
  - Manufacturing
  - Military Science
  - Naval Science
  - Aerospace Studies
  - Education
  - Accountancy
  - 3+3 Accelerated Pre-Law
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## Overview

The School of Engineering offers a Bachelor of Engineering (B.E.) degree, which is more broadly focused than the B.S. in engineering science programs. The B.E. is designed to provide students the opportunity to gain an understanding of engineering, scientific and technical knowledge, which will enhance their career objectives in engineering science and in areas outside engineering.

The B.E. program allows students with specific career goals to individualize their education. Students achieve the same broad understanding of scientific and technical knowledge as their peers in the professional engineering degree programs by taking the same engineering foundation courses. But after students have fulfilled the common requirements of the university and School of Engineering, they embark on 33 hours of courses they choose to fit their individual career goals.

Graduates of the B.E. program are well-rounded and ready to tackle any problem and undertake almost any career.

<https://engineering.olemiss.edu/be/>

Find the advising sheet for your major at: <https://engineering.olemiss.edu/advising/>

See advisor for curriculum guidance in selecting your emphasis areas.

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136 Anderson

## BACHELOR OF ENGINEERING – Generic Curriculum

### FRESHMAN YEAR FALL

WRIT	101	First-Year Writing I .....	3
MATH	261	Calculus I .....	3
CHEM	105	General Chemistry I.....	3
CHEM	115	General Chemistry Lab I.....	1
S-H-F	xxx	SS-Hum-FA Elective.....	3
ENGR	100	Intro to Engineering.....	3
Semester Total .....			16

### SPRING

WRIT	102	First-Year Writing II .....	3
MATH	262	Calculus II .....	3
CHEM	106	General Chemistry II.....	3
CHEM	116	General Chemistry Lab II.....	1
CSCI	251	Program Engr & Sci .....	3
S-H-F	xxx	SS-Hum-FA Elective .....	3
Semester Total .....			16

### SOPHOMORE YEAR

MATH	263	Calculus III.....	3
PHYS	211	Physics for Sci. & Engr. I.....	3
PHYS	221	Physics Sci. & Engr. Lab I .....	1
Engr	313	Material Science .....	3
Emphasis		Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			16

MATH	264	Calculus IV .....	3
MATH	353	Differential Equations .....	3
PHYS	212	Physics Sci. & Engr. II.....	3
PHYS	222	Physics Sci.&Engr.Lab II.....	1
Engr	321	Thermodynamics.....	3
S-H-F	xxx	SS-Hum-FA Elective .....	3
Semester Total .....			16

### JUNIOR YEAR

ENGR	360	Electric Circuit Theory.....	3
ENGR	310	Engineering Analysis I .....	3
Emphasis		Elective.....	3
Emphasis		Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			15

ENGR	361	Electric Circuit Lab .....	1
ENGR	309	Engineering Mechanics.....	3
Emphasis		Elective.....	3
Emphasis		Elective.....	3
Emphasis		Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective .....	3
Semester Total .....			16

### SENIOR YEAR

ENGR	400	Leadership.....	1
ENGR	330	Engr. Syst. Analysis & Des.....	3
Engineering		Elective.....	3
Emphasis		Elective.....	3
Emphasis		Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			16

Engineering		Elective.....	3
Engineering		Elective.....	3
Emphasis		Elective.....	3
Emphasis		Elective.....	3
Emphasis		Elective.....	3
Semester Total .....			15

NOTE: Students pursuing the accelerated 3+3 Pre-Law emphasis will complete all emphasis electives in the senior year of the B.E. program, which will be the simultaneous first year of the law school.

# Biomedical Engineering

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- Biomedical Electronics
  - Biomechanics
  - Biomechatronics
  - Bioinstrumentation
  - Biomaterials
  - Biomechanics
  - Bionics
  - Cellular, Tissue, & Genetic Engineering
  - Clinical Engineering
  - Medical Imaging
  - Orthopaedic Bioengineering
  - Rehabilitation Engineering
  - Systems Physiology
  - Neural Engineering
  - Computational Modeling
- 

## Overview

With the selection of Biomedical Engineering, you have taken the first exciting step in what is a truly remarkable endeavor; that of a life and career in STEM and engineering medical applications. The Bachelor of Science in Biomedical Engineering is a degree that allows one to work at the ever-changing interface of medicine and traditional engineering.

We have three different tracks to choose from including [Biomolecular](#), Biomedical Systems, and Bioinformatics. You will be prepared to work in a wide array of industrial fields, as well as do substantive work in research and clinical settings.

Biomedical engineering is a rapidly growing, interdisciplinary field that helps translate health needs into practical realities. It's an exciting time to be a Biomedical Engineer, and we have put together a curriculum that will both challenge and prepare you for a life time of rewarding work.

<https://engineering.olemiss.edu/biomedical/>

For more information about degrees in BioInformations Track and Systems Track, contact Dwight Waddell.

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Academic Program Director

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237 Brevard

**B.S. | BIOMEDICAL ENGINEERING | BIOMOLECULAR TRACK**

**FRESHMAN YEAR FALL**

WRIT	101	Writing I.....	3
MATH	261	Calculus I.....	3
CHEM	105	Chemistry I.....	3
CHEM	115	Chemistry Lab I.....	1
BISC	160	Biology I.....	3
BISC	161	Biology Lab I.....	1
SS/H/FA	xxx	Liberal Arts.....	3
Semester Total .....			17

**SPRING**

WRIT	102	Writing II.....	3
MATH	262	Calculus II.....	3
CHEM	106	Chemistry II.....	3
CHEM	116	Chemistry Lab II.....	1
BISC	162	Biology II.....	3
BISC	163	Biology Lab II.....	1
SS/H/FA	xxx	Liberal Arts.....	3
Semester Total .....			17

**SOPHOMORE YEAR**

BME	200	Intro to BME.....	2
Ch E	307	Mass Balance.....	2
PHYS	211	Physics I.....	3
PHYS	221	Physics Lab I.....	1
MATH	263	Calculus III.....	3
CSCI	251	Matlab Programming.....	3
BME	222	Biomaterials.....	3
Semester Total .....			17

Ch E	308	Energy Balance.....	2
PHYS	212	Physics II.....	3
PHYS	222	Physics Lab II.....	1
MATH	264	Calculus IV.....	3
MATH	353	Differential Equations.....	3
ENGR	360	Circuits.....	3
Econ	310	Engineering Economics.....	3
Semester Total .....			18

**JUNIOR YEAR**

CHEM	221	Organic Chemistry I.....	3
CHEM	225	Organic Chemistry Lab I.....	1
BME	333	Biological Transport.....	3
EL E	331	Linear Systems.....	3
Bisc	333	Molecular Biology.....	4
EL E	313	Physiology for BME.....	3
Semester Total .....			17

Ch E	520	Biochemical Processing.....	3
EL E	314	Biomedical Measures.....	1
BME	320	Bioseparations.....	3
BME	444	Biomedical Controls.....	3
SS/H/FA	xxx	Liberal Arts.....	3
ENGR	310	Engineering Analysis I.....	3
Semester Total .....			16

**SENIOR YEAR**

BME	461	Senior Design I.....	2
ENGR	400	Leadership in ENGR.....	1
SS/H/FA	xxx	Liberal Arts.....	3
Ch E	545	Colloid & Surface Science.....	3
Track	xxx	Elective.....	3
ENGR	xxx	Elective.....	3
Semester Total .....			15

BME	462	Senior Design II.....	2
Track	xxx	Elective.....	3
Track	xxx	Elective.....	3
SS/H/FA	xxx	Liberal Arts.....	3
Semester Total .....			11

# Chemical Engineering

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- Manufacturing
  - Pre-Med
  - Process Control
  - Process Design
  - Pharmaceuticals
  - Petrochemicals
  - Plastics
  - Biotechnology
  - Environmental Consulting
  - Solar Panels
  - Aerospace
  - Food/Beverage Products
  - Personal Care Products
- 

## Overview

The Department of Chemical Engineering offers a Bachelor of Science in Chemical Engineering (B.S.Ch.E.) degree, with optional emphasis in: biotech, biomedical, environmental, materials, manufacturing, pre-med (pathway).

Chemical engineering is an exciting and challenging profession that uses chemistry, mathematics and physics to provide solutions to real-world problems in fields as varied as biomedical engineering, personal-care products, petroleum and natural gas, pharmaceuticals and materials processing.

Graduates from the Department of Chemical Engineering at the University of Mississippi will globally compete in the professional world, succeed in their chosen career or in continued education, and use flexible problem-solving skills to address complex issues in society.

Through the B.S.Ch.E. curriculum, our students will demonstrate an:

- Ability to apply knowledge of math, engineering and science
- Ability to design and conduct experiments
- Ability to analyze and interpret data
- Ability to design a system, component or process to meet desired needs with realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
- Ability to function on multidisciplinary teams
- Ability to identify, formulate and solve engineering problems
- Understanding of professional and ethical responsibility
- Ability to communicate effectively

<https://engineering.olemiss.edu/chemical/>

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Department Chair

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## B.S. | CHEMICAL ENGINEERING

## FRESHMAN YEAR FALL

WRIT	101	First-Year Writing.....	3
MATH	261	Calculus I.....	3
CHEM	105	General Chemistry I.....	3
CHEM	115	General Chemistry Lab I.....	1
CHE	101	or CHE 251.....	2-3
S-H-F	xxx	SS-Hum-FA Elective.....	3

Semester Total .....15-16

## SPRING

WRIT	102	English Composition II.....	3
MATH	262	Calculus II.....	3
CHEM	106	General Chemistry II.....	3
CHEM	116	General Chemistry Lab II.....	1
CHE	251	or CHE 101.....	2-3
S-H-F	xxx	SS-Hum-FA Elective.....	3

Semester Total .....15-16

## SOPHOMORE YEAR

MATH	263	Calculus III.....	3
PHYS	211	Physics for Sci. & Engr.....	3
PHYS	221	Physics Sci. & Engr. Lab I.....	1
CHE	307	Chemical Proc. Principles I.....	2
CHEM	221	Elem. Organic Chem. I.....	3
CHEM	225	Elem. Organic Chem. Lab I.....	1
S-H-F	xxx	SS-Hum-FA Elective.....	3

Semester Total .....16

MATH	264	Calculus IV.....	3
MATH	353	Differential Equations.....	3
PHYS	212	Physics Sci. & Engr. II.....	3
PHYS	222	Phys. Sci.& Engr. Lab II.....	1
CHE	308	Chem. Proc Principles II.....	2
ENGR	321	Thermodynamics.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3

Semester Total .....18

## JUNIOR YEAR

ENGR	310	Engineering Analysis I.....	3
ENGR	322	Transport Phenomena.....	3
XXXX	xxx	Advanced Science.....	3
CHE	421	Chem.Engr.Thermodyna.....	3
Tech-E	xxx	Technical Elective.....	3

Semester Total .....15

ENGR	xxx	Engineering Elective.....	3
CHE	345	Engineering Economy.....	3
CHE	417	Separation Processes.....	3
CHE	423	Chem Reactor Analysis.....	3
Tech-E	xxx	Technical Elective.....	3

Semester Total .....15

## SENIOR YEAR

CHE	317	Proc Fluids&Heat Transfer.....	3
CHE	411	Chemical Eng. Seminar.....	1
CHE	445	Chemical Eng. Lab I.....	2
CHE	451	Plant Design I.....	4
Tech-E	xxx	Technical Elective I.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3

Semester Total .....16

ENGR	313	Intro to Material Science.....	3
CHE	446	Chem. Eng. Lab II.....	2
CHE	452	Plant Design II.....	3
Ch E	412	Proc. Dynamics&Control.....	3
Tech-E	xxx	Technical Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3

Semester Total .....17

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# Civil Engineering

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- Structural Engineering
- Sustainability
- Advanced Materials
- Transportation
- Levees and Dams
- Seismic Engineering
- Water Quality
- Foundations
- Blast Protection
- Infrastructure
- Green Buildings
- Alternative Energy
- Geospatial Analysis
- Nanotechnology
- Pollution Control

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## Overview

The Bachelor of Science in Civil Engineering (B.S.C.E.) is the road map that leads to a professional engineering degree that emphasizes the concepts needed to properly design, construct, and maintain naturally and/or physically built environmental systems such as roads, highways, bridges, dams, canals, water treatment plants, wastewater treatment plants, and buildings.

Our curriculum has a good balance between math, physics, chemistry, engineering sciences, and civil engineering professional courses within liberal arts settings. Our program has an excellent student/faculty ratio with excellent facilities for hands-on education. Our interactions are more personable, and we proudly have a close-knit student body. Most of our students are involved with the designing and building of concrete canoes and steel bridges. We also participate in regional competitions. Our students have lots of fun during these competitions.

A graduate of our Civil Engineering program can be involved in the design, construction or operation of many critical facilities. Just to name a few, these facilities could be highways, water or wastewater treatment plants, bridges, high-rise buildings, dams, aircrafts, hospitals, transmission towers, nuclear power plants, traffic signals, and airports.

A successful civil engineering student must be hardworking, responsible, dedicated, ethical, creative, personable, patient, sociable, fun loving, and be ready to lead when needed. We are very proud of our accomplished and highly supportive alumni.

If you want a job, a great education, and to have fun while doing it, join us in civil engineering!

<https://engineering.olemiss.edu/civil/>

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Department Chair

Yacoub Najjar, Ph.D., Professor  
ymnajjar@olemiss.edu  
106 Carrier Hall

## BACHELOR OF SCIENCE IN CIVIL ENGINEERING

## FRESHMAN YEAR FALL

WRIT	101	First-Year Writing I .....	3
MATH	261	Calculus I .....	3
CHEM	105	General Chemistry I.....	3
CHEM	115	General Chemistry Lab I.....	1
C E	101	Intro to Civil Engr. I .....	1
S-H-F	xxx	SS Elective.....	3

Semester Total ..... 14

## SPRING

WRIT	102	First-Year Writing II .....	3
MATH	262	Calculus II .....	3
PHYS	211	Physics for Sci. & Engr. I .....	3
PHYS	221	Physics for Sci/Engr. Lab I .....	1
CSCI	251	Program For Engr. & Sci.....	3
C E	102	Intro to Civil Engr. II.....	1
S-H-F	xxx	Hum Elective.....	3

Semester Total ..... 17

## SOPHOMORE YEAR

MATH	263	Calculus III.....	3
PHYS	212	Physics for Sci. & Engr. II.....	3
PHYS	222	Physics Sci. & Engr. Lab II .....	1
ENGR	309	Statics.....	3
SPCH	10x	Speech Elective.....	3
S-H-F	xxx	FA Elective.....	3

Semester Total ..... 16

MATH	264	Calculus IV.....	3
MATH	353	Differential Equations.....	3
CE	208	CE Graphics I.....	1
ENGR	312	Mechanics Materials.....	3
C E	207	Surveying .....	2
C E	310	Intro Structural Mechanics.....	3
S-H-F	xxx	Hum/FA Elective.....	3

Semester Total ..... 18

## JUNIOR YEAR

ENGR	323	Fluid Mechanics.....	3
C E	311	Structural Analysis .....	3
C E	481	Transportation Engr. I.....	3
C E	205	C E Lab I .....	1
CE	412	Concrete Design.....	3
ENGR	310	Engineering Analysis I .....	3

Semester Total ..... 16

C E	305	C E Lab II.....	1
C E	315	Civil Eng Materials.....	3
C E	413	Steel Design .....	3
C E	431	Soil Mechanics I.....	3
C E	471	Environmental Engr. I.....	3
ECON	310	Engineering Economy .....	3

Semester Total ..... 16

## SENIOR YEAR

C E	401	C E Fundamentals.....	1
C E	405	C E Lab III.....	1
C E	433	Foundations.....	3
C E	455	Civil Engineering Design I.....	2
C E	472	Water Resources Eng.....	3
ENGR	400	Leadership & Profess.....	1
Tech-E	xxx	Technical Elective B1.....	3
Tech-E	xxx	Technical Elective B2.....	3

Semester Total ..... 17

C E	417	Construc Engr.&Mgmt.....	3
C E	456	Civil Eng. Design II.....	3
SCI-E	xxx	Science Elective.....	3
Tech-E	xxx	Technical Elective A1 .....	3
Tech-E	xxx	Technical Elective A2.....	3

Semester Total ..... 15

# Computer Science

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- Systems Analyst
  - Mobile Applications Designer
  - Software Engineer
  - Systems Engineer
  - Programmer
  - Database Administrator
  - Web Page Designer
  - Network Administrator
  - Data Scientist
- 

## Overview

The Department of Computer and Information Science offers a Bachelor of Science in Computer Science (B.S.C.S) degree. This is an ABET/CAC-accredited professional degree in computer science. Through the College of Liberal Arts, we offer a major in computer science within the Bachelor of Arts (B.A.) degree program.

The Department of Computer Science offers exciting and innovative undergraduate and graduate programs on the beautiful campus of the University of Mississippi in historic Oxford, Mississippi. Surrounded by beautiful tree-lined horizons and nestled in a valley of North Mississippi, we are breaking new ground in computer science education and research.

The department has entered a new era in the past few years. Our undergraduate enrollment is growing. We have added new faculty members to our solid base of experienced faculty. We have developed new courses on important topics such as data science, digital design and 3D printing, web programming, computer security, mobile application development, and immersive media (virtual reality).

Thanks to the many generous gifts of alumni, we continue to offer exciting opportunities for our students.

<http://cs.olemiss.edu/>

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Department Chair  
Dawn Wilkins, Ph.D., Professor  
[dwilkins@cs.olemiss.edu](mailto:dwilkins@cs.olemiss.edu)  
201 Weir Hall

## BACHELOR OF SCIENCE IN COMPUTER SCIENCE

## FRESHMAN YEAR FALL

CSCI	111	Computer Science I.....	3
MATH	261	Calculus I.....	3
WRIT	101	First-Year Writing.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			15

## SPRING

CSCI	112	Computer Science II.....	3
MATH	262	Calculus II.....	3
WRIT	102	First-Year Writing.....	3
SPCH	xxx	Speech 102 or 105.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			15

## SOPHOMORE YEAR

CSCI	211	Computer Science III.....	3
MATH	301	Discrete Math.....	3
SCI	xxx	Lab Science for Majors I.....	3
SCI	xxx	Lab Science Majors Lab I.....	1
ENG	22X	Sophomore Literature.....	3
Tech-E	xxx	Technical Elective I.....	3
Semester Total .....			16

CSCI	223	Comp Org./Assembly.....	3
MATH	302	Applied Mod. Algebra.....	3
SCI	xxx	Lab Science for Majors II.....	3
SCI	xxx	Lab Science Majors Lab II.....	1
S-H-F	xxx	SS-Hum-FA Elective.....	3
Tech-E	xxx	Technical Elective II.....	3
Semester Total .....			16

## JUNIOR YEAR

CSCI	300	Social Responsibility.....	1
CSCI	311	Models of Computation.....	3
CSCI	423	Operating Systems.....	3
MATH	375	Statistical Methods.....	3
EL E	235	Digital Systems.....	3
EL E	236	Digital Systems Lab I.....	1
Tech-E	xxx	Technical Elective III.....	3
Semester Total .....			17

CSCI	387	Software Des/Dev.....	3
CSCI	433	Algorithms.....	3
CSCI	3xx	Computer Science Elective.....	3
MATH	263	Calculus III.....	3
or MATH	319	Linear Algebra.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			15

## SENIOR YEAR

CSCI	450	Program. Languages Org.....	3
CSCI	3xx	Computer Science Elective.....	3
CSCI	3xx	Computer Science Elective.....	3
Tech-E	xxx	Technical Elective IV.....	3
Tech-E	xxx	Technical Elective V.....	3
Science Elective .....			3
Semester Total .....			18

CSCI	487	Senior Project.....	3
CSCI	3xx	Computer Science Elec.....	3
CSCI	3xx	Computer Science Elec.....	3
Tech-E	xxx	Technical Elective VI.....	3
SCI	xxx	Science Elective.....	3
Semester Total .....			15

# Electrical Engineering

- 
- Computer Engineering
  - Robotics
  - Utility Companies
  - Radar Systems
  - Manufacturing
  - Aerospace
  - Bio-Medical
  - Electronic Chip Design
  - Telecommunications
  - Automotive
  - RF/Wireless
- 

## Overview

The Department of Electrical Engineering offers a Bachelor of Science in Electrical Engineering (B.S.E.E.) degree and a Bachelor of Science in Computer Engineering (B.S.C.P.E.) degree.

Electrical and computer engineering are exciting and challenging professions that use electricity and electronics to provide solutions to real-world problems. It is a profession based on using the fundamentals of engineering, physics and mathematics.

Electrical engineering provides a broad spectrum of career opportunities to choose from. Examples include circuit design, control systems, communications, networking, digital system design, VLSI circuits, embedded systems, wearable computing, electromagnetics, antennas and signal processing. Electrical engineering can also provide a unique background for further study in the business, medical or legal professions.

The electrical engineering and computer engineering undergraduate programs are founded on basic sciences, mathematics and engineering science fundamentals. The program emphasizes engineering science and focuses on the application of scientific knowledge to the solution of engineering problems. This focus is intended to lead students to develop analysis and design skills, and original thought processes that will serve them throughout their careers in a rapidly changing world.

<https://engineering.olemiss.edu/electrical/>

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## Department Chair

Ramanarayanan "Vish" Viswanathan, Ph.D., Professor  
viswa@olemiss.edu  
302 Anderson Hall

**B.S. | ELECTRICAL ENGINEERING****FRESHMAN YEAR****FALL**

CHEM	105	General Chemistry I.....	3
CHEM	115	General Chemistry Lab I.....	1
CSCI	251	Prog. for Eng. and Sci.....	3
EL E	100	Intro. to Electrical Eng. ....	1
MATH	261	Calculus I.....	3
WRIT	101	First-Year Writing I.....	3
Semester Total .....			14

**SPRING**

CSCI	259	Programming in C++.....	3
EL E	235	Princip. Digital Systems.....	3
EL E	236	Digital Systems Lab I.....	1
MATH	262	Calculus II.....	3
PHYS	211	Phys. Sci. & Eng. I.....	3
PHYS	221	Phys. Sci. & Eng. Lab I.....	1
WRIT	102	First-Year Writing II.....	3
Semester Total.....			17

**SOPHOMORE YEAR**

EL E	385	Advanced Digital Systems.....	3
ENGR	360	Electric Circuit Theory.....	3
MATH	263	Calculus III.....	3
PHYS	212	Phys. for Sci. & Eng. II.....	3
PHYS	222	Phys. for Sci. & Eng. Lab II.....	1
S-H-F	xxx	.....	3
EL E	237	Tools and Toys.....	1
Semester Total .....			17

ECON	310	Engineering Economy.....	3
EL E	386	Adv. Digital Sys. Lab.....	1
ENGR	361	Electric Circuit Lab.....	1
ENGR	310	Engineering Analysis I.....	3
MATH	264	Calculus IV.....	3
MATH	353	Differential Equations.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			17

**JUNIOR YEAR**

EL E	351	Electronic Circuits I.....	3
EL E	485	Micropr. Systems Eng. ....	2
EL E	486	Micropr. Systems Eng. Lab.....	1
EL E	331	Linear Systems.....	3
ENGR	309	Statics.....	3
EL E	340	Engineering Analysis I.....	3
Semester Total .....			15

EL E	341	Theory of Fields.....	3
EL E	352	Electronics circuits II.....	3
EL E	353	Electronics Lab.....	1
EL E	367	CAD in Electrical Eng.....	3
EL E	391	Random Signals.....	3
EL E	431	Theory of Control Syst. ....	3
Semester Total .....			16

**SENIOR YEAR**

EL E	447	Mod., Noise & Comm. ....	3
EL E	461	Senior Design in EE I.....	1
EL E	xxx	Tech-E.....	3
ENGR	321	Thermodynamics.....	3
S-H-F	xxx	.....	3
S-H-F	xxx	.....	3
Semester Total .....			16

EL E	462	Senior Design in EE II.....	2
S-H-F	xxx	SS-Hum-FA Elective.....	3
Tech-E	xxx	Technical Elective.....	11
Semester Total .....			16

## B.S. | COMPUTER ENGINEERING

### FRESHMAN YEAR

CHEM	105	General Chemistry I.....	3
CHEM	115	General Chemistry Lab I.....	1
CSCI	256	Program in Python.....	3
EL E	100	Intro. to Electrical Eng. ....	1
MATH	261	Calculus I.....	3
WRIT	101	First-Year Writing I.....	3
SHF	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			17

### FALL

### SPRING

CSCI	356	Data Strut in Python.....	3
EL E	235	Princip. Digital Systems.....	3
EL E	236	Digital Systems Lab I.....	1
MATH	262	Calculus II.....	3
PHYS	211	Phys. Sci. & Eng. I.....	3
PHYS	221	Phys. Sci. & Engr. Lab I.....	1
WRIT	102	First-Year Writing II.....	3
Semester Total.....			17

### SOPHOMORE YEAR

EL E	385	Advanced Digital Systems.....	3
ENGR	360	Electric Circuit Theory.....	3
MATH	263	Calculus III.....	3
PHYS	212	Phys. for Sci. & Eng. II.....	3
PHYS	222	Phys. for Sci. & Eng. Lab II.....	1
S-H-F	xxx	SS-Hum-FA Elective.....	3
EL E	237	Tools and Toys.....	1
Semester Total .....			17

MATH	353	Differential Equations.....	3
EL E	386	Adv. Digital Sys. Lab.....	1
ENGR	361	Electric Circuit Lab.....	1
ENGR	310	Engineering Analysis I.....	3
MATH	264	Calculus IV.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			17

### JUNIOR YEAR

EL E	351	Electronic Circuits I.....	3
EL E	485	Micropr. Systems Eng. ....	2
EL E	486	Micropr. Systems Eng. Lab.....	1
EL E	331	Linear Systems.....	3
MATH	301	Discrete Math.....	3
CSCI	423	Intro to Oper Systems.....	3
Semester Total .....			15

CPE	431	Computer Architecture.....	3
EL E	352	Electronics circuits II.....	3
EL E	353	Electronics Lab.....	1
EL E	367	CAD in Electrical Eng.....	3
EL E	391	Random Signals.....	3
CSCI	431	Algorithm & Data Struture.....	3
Semester Total .....			16

### SENIOR YEAR

EL E	425	Local Area Networks.....	3
CPE	461	Senior Design in EE I.....	1
EL E	xxx	Tech-E.....	3
ELE	xxx	Tech -E.....	3
ELE	xxx	Tech -E.....	3
Semester Total .....			13

EL E	xxx	Tech-E.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Tech-E	xxx	Technical Elective.....	3
ECON	310	Engineering Econ.....	3
ELE	462	Senior Design in EE II.....	2
Semester Total .....			14





# Mechanical Engineering

- 
- Automotive
  - Aerospace
  - Manufacturing
  - Biomedical
  - Nanotechnology
  - National Defense
  - Product Design
  - Robotics
  - Technology
- 

## Overview

The Department of Mechanical Engineering offers a Bachelor of Science in Mechanical Engineering (B.S.M.E.) degree.

Mechanical Engineers solve problems related to mechanical, materials, fluids, thermal, and environmental systems. The profession appeals to students who like to think and find solutions to new and existing challenges.

Mechanical engineering graduates are academically equipped to work in a broad spectrum of industries such as oil, manufacturing, aerospace, power generation, chemical, automotive, air-conditioning and refrigeration, energy conservation and environmental. Virtually every type of industry employs mechanical engineers.

<https://engineering.olemiss.edu/mechanical/>

See advisor for curriculum guidance in selecting your emphasis areas.

The Haley Barbour Center for Manufacturing Excellence (CME):

<https://www.cme.ms>



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Department Chair

A.M. "Raj" Rajendran, Ph.D., Professor  
raj@olemiss.edu  
229 Carrier Hall

## B.S. | MECHANICAL ENGINEERING

## FRESHMAN YEAR

## FALL

WRIT	101	First-Year Writing I .....	3
MATH	261	Calculus I .....	3
CHEM	105	General Chemistry I.....	3
CHEM	115	General Chemistry Lab I .....	1
S-H-F	xxx	SS-Hum-FA Elective.....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			16

## SPRING

WRIT	102	First-Year Writing II .....	3
MATH	262	Calculus II .....	3
CHEM	106	General Chemistry II.....	3
CHEM	116	General Chemi. Lab II .....	1
M E	101	Intro to Mech. Eng.....	1
S-H-F	xxx	SS-Hum-FA Elective .....	3
S-H-F	xxx	SS-Hum-FA Elective .....	3
Semester Total .....			17

## SOPHOMORE YEAR

MATH	263	Calculus III.....	3
PHYS	211	Physics for Sci. & Engr. I.....	3
PHYS	221	Physics Sci. & Engr. Lab I .....	1
CSCI	251	Prog. For Engr. and Sci.....	3
ME	201	Engineering Graphics.....	2
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			15

MATH	264	Calculus IV.....	3
MATH	353	Differential Equations.....	3
PHYS	212	Physics Sci. & Engr. II.....	3
PHYS	222	Physics Sci. & Engr. Lab I.....	1
ENGR	309	Statics .....	3
ENGR	321	Thermodynamics.....	3
Semester Total .....			16

## JUNIOR YEAR

ENGR	310	or MATH 375 .....	3
ENGR	313	Intro to Material Science.....	3
ENGR	314	Material Sci. Laboratory.....	1
ENGR	312	Mechanics of Materials.....	3
ENGR	330	Engr. Systems Ana.& Des.....	3
ENGR	360	Electric Circuit Theory.....	3
Semester Total .....			16

ENGR	323	Fluid Mechanics .....	3
ENGR	361	Elec.Circuit Theory Lab .....	1
M E	324	Intro Mechanical Design.....	3
M E	325	Intermediate Dynamics.....	3
ENGR	420	Engineering Analysis III .....	3
ECON	310	Engr. Econ.....	3
Semester Total .....			16

## SENIOR YEAR

M E	401	Thermo-Fluid Dynamics.....	3
	xxx	Thermal/Fluid Elective.....	3
M E	416	Structures&Dynamics Lab. ....	1
M E	426	Kinematic Ana. and Synth.....	3
	xxx	Design Elective .....	3
S-H-F	xxx	SS-Hum-FA Elective.....	3
Semester Total .....			16

M E	402	Elements of Propulsion.....	3
M E	419	Energy and Fluids Lab.....	1
M E	428	Dynamics of Machinery.....	3
M E	438	Mechanical Engr. Design.....	3
ENGR	553	Heat Transfer .....	3
Tech-E	xxx	Technical Elective II .....	3
Semester Total .....			16

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# Geology & Geological Engineering

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- Natural Hazard Mitigation
  - Mapping & Resource Assessment
  - Geotechnical Engineering
  - Mining/Oil & Gas
  - Inspector/Construction Projects
  - Oceanography/Marine Geological Studies
  - Research Scientist
  - Secondary Teacher or Professor
  - Environmental Law
  - Water Quality & Supply
- 

## Overview

The Department of Geology and Geological Engineering offers a Bachelor of Science in Geological Engineering (B.S.G.E.) and Bachelor of Science in Geology (B.S. Geology).

### *What is Geology?*

Geology is the branch of science that studies a wide variety of Earth systems including (1) the origins and history of the Earth, (2) extraction of Earth resources such as coal, oil and natural gas, (3) natural hazards such as earthquakes, volcanism and landslides, (4) global climate change, (5) hydrology, and (6) interactions between the geosphere, biosphere, hydrosphere and atmosphere.

### *What is Geological Engineering?*

Geological engineering combines the two challenging disciplines of geology and engineering, which makes for a rewarding career. In planning a construction project, the “geologist” part looks for the most stable, ideal piece of land for building. The geological engineer then relies on his or her engineering training to evaluate how the structure to be built will affect the environment as well as the structural design considerations related to data from analyzing the geology of the site.

<https://engineering.olemiss.edu/gge/>

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Department Chair  
Gregg R. Davidson, Ph.D., Professor  
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120 Carrier Hall

## B.S. | GEOLOGY

FRESHMAN YEAR		FALL	SPRING						
WRIT	101	First-Year Writing I.....	3	WRIT	102	First-Year Writing II.....	3		
MATH	125	Basic Math Sci&Eng.....	3	MATH	261	Calculus.....	3		
CHEM	105	General Chemistry I.....	3	CHEM	106	General Chemistry II.....	3		
CHEM	115	General Chemistry Lab I.....	1	CHEM	116	General Chemistry Lab II.....	1		
GEOL	103	Earth Dynamics.....	4	GEOL	106	Earth History.....	2		
					xxx	Social Science Elective.....	3		
Semester Total .....				14	Semester Total .....				15

## SOPHOMORE YEAR

MATH	262	Calculus II.....	3	SPCH 102/103	Public Speaking.....	3			
PHYS	213	General Physics I.....	3	GEOL	314	Sedimentology & Strat.....	4		
PHYS	223	Laboratory Physics I.....	1	PHYS	214	General Physics II.....	3		
GEOL	225	Mineralogy & Petrology.....	5	PHYS	224	Laboratory Physics I.....	1		
SS	xxx	Social Science Elective.....	3	GEOL	105	Environ. (Resources).....	3		
				ENGR	340	Engineering Geology.....	3		
Semester Total .....				15	Semester Total .....				17

Summer: GE 301 Geological Engineering Design Field Camp I Credit Hours: 3

## JUNIOR YEAR

GEOL	305	Geomorphology.....	3	GEOL	303	Structural Geology.....	3		
WRIT	250	Advanced Composition.....	3	F	XXX	Fine Art Elective.....	3		
GEOL	309	Paleontology.....	4	HUM	XXX	Humanities Elective.....	3		
CSCI	111	Computer Science I.....	3	ECON	310	Engr. Economics.....	3		
ENGR	310	Engineering Analysis I.....	3	Geol/GE Elective .....			3		
Semester Total .....				16	Semester Total .....				15

Summer: GE 401 Geological Engineering Design Field Camp II Credit Hours: 3

## SENIOR YEAR

G E	450	Hydrogeology.....	4	GE	405 or 503.....				
G E	470	Intro to GIS.....	3	HUM	xxx	Humanities Elective.....	3		
G E	420	Subsurface Site Character.....	4		xxx	General Elective 2.....	3		
Geol	420 or 520.....		3	Tech-E	XXX	Tech Elective 3.....	3		
Semester Total .....				14	Semester Total .....				12

## B.S. | GEOLOGICAL ENGINEERING

FRESHMAN YEAR		FALL			SPRING				
WRIT	101	First-Year Writing I.....	3	WRIT	102	First-Year Writing II.....	3		
MATH	261	Calculus I.....	3	MATH	262	Calculus II.....	3		
CHEM	105	General Chemistry I.....	3	CHEM	106	General Chemistry II.....	3		
CHEM	115	General Chemistry Lab I.....	1	CHEM	116	General Chemistry Lab II.....	1		
GEOL	103	Earth Dynamics.....	4	GEOL	106	Earth History.....	2		
					xxx	Social Science Elective.....	3		
Semester Total .....				14	Semester Total .....				15

### SOPHOMORE YEAR

MATH	263	Calculus III.....	3	MATH	264	Calculus IV.....	3		
PHYS	211	Physics for Sci. & Engr. I.....	3	GEOL	314	Sedimentology & Strat.....	4		
PHYS	221	Physics Sci. & Engr. Lab I.....	1	PHYS	212	Physics Sci. & Engr. II.....	3		
ENGR	207	Graphics.....	1	PHYS	222	Physics Sci&Engr Lab II.....	1		
GEOL	225	Min/Petrology.....	5	ENGR	312	Mech of Mat.....	3		
ENGR	309	Statics.....	3	ENGR	340	Engineering Geology.....	3		
Semester Total .....				16	Semester Total .....				17

Summer: GE 301 Geological Engineering Design Field Camp I Credit Hours: 3

### JUNIOR YEAR

ENGR	310	Engr Analysis.....	3	ENGR	323	Fluid Mechanics.....	3		
MATH	353	Differential Equations.....	3	G E	540	Rock Mech.....	4		
GEOL	305	Geomorphology.....	3	G E	405	Engineering Geophysics.....	3		
CSCI	251	Prog for Engr and Sci.....	3	GEOL	303	Structural Geology.....	3		
	xxx	Fine Arts Elective.....	3	ENGR	xxx	Engr Sci Elective.....	3		
G E	470	Intro to GIS.....	3						
Semester Total .....				18	Semester Total .....				16

Summer: GE 401 Geological Engineering Design Field Camp II Credit Hours: 3

### SENIOR YEAR

G E	420	Subsurface Site Character.....	4	C E	431	Soil Mechanics I.....	3		
G E	450	Hydrology.....	4	G E	421	Geological Eng. Design.....	4		
	xxx	Humanities Elective.....	3	ECON	310	Engineering Economy.....	3		
Engr	xxx	Engr Sci Elective.....	3		xxx	SS-Hum-FA-Other Elective.....	3		
	xxx	Humanities or Fine Arts Elective.....	3	G E	xxx	GE Tech Elective.....	3		
Semester Total .....				17	Semester Total .....				16

# Advising Guidance

## Grade-Point Average to earn a B.S. degree (minimum requirements)

- > *2.00 GPA overall on all college work attempted at all institutions*
- > *2.00 GPA cumulative in residence at Ole Miss*
- > *2.00 GPA in School of Engineering course work*

## Minor

The School of Engineering does not require, but recognizes a minor course of study in a department different from the major. Unless otherwise specified, a minor consists of 18 hours; 2.00 minimum GPA is required in all work applied toward the minor.

## Dual Enrollment / IB Credit / AP Credit

The School of Engineering recognizes credit earned by these methods in accordance with The University of Mississippi undergraduate catalog.

Students pursuing any of the nine degree programs within the School of Engineering may choose to declare a minor. A minor field may be any discipline that offers a minor at the University of Mississippi with the exception of chemistry for chemical engineering students, geology for geological engineering students, and computer science for electrical engineering students pursuing the computer engineering option. The required courses and number of hours for each minor field can be found in the university undergraduate catalog. However, no more than 8 credit hours from courses required by the engineering degree and cited specifically by course number and title as a requirement for that degree may be used toward fulfillment of the minor requirements. A minor is available for students pursuing the Bachelor of Engineering degree if different from the emphasis area.

## Honors College

Honors 101 and 102 can be used to satisfy the 6-hour First-Year Writing (WRIT) requirement. Alternatively, a student may apply the credits toward humanities or social science hours, especially if the student has AP English or other college composition credit. For the School of Engineering, HON 101-102 can satisfy 3 hours of humanities and/or 3 hours of social science.

### **Special Case: Math Minor for School of Engineering**

Course requirements for the existing 15-hour minor in mathematics as defined by the College of Liberal Arts PLUS two additional 3-hour math courses at the 300 level or above that are not used to fulfill the degree from the School of Engineering. Although not 300 level, B.S.C.S. majors are allowed to count MATH 264 as one of the two additional math courses. The math minor for engineering requires a total of 15 + 6 credit hours.

### **Freshmen Academic Requirements**

To enhance the success of students in the Engineering programs, freshmen not meeting the following criteria are subject to additional academic requirements.

- Students not meeting the minimum criterion of ACT math score 25 must be enrolled in Engr 100 and MATH 125 (or MATH 121 and 123 depending on math background), before they are eligible for MATH 261 Calculus I and CHEM 105.
- Students not meeting the minimum criterion of high school GPA 3.00 must be enrolled in Engr 100 Freshman Year Experience course.

### **Social Sciences, Humanities & Fine Arts**

- 18 hours required for SoE
- 6 credit hours in social/behavior sciences, 9 hours in humanities and fine arts with at least 3 hours in each are required for all degree programs at the university.
- The final 3 credits may be from humanities, social/behavioral science or general education course work in the School of Engineering as defined by individual department curriculum requirements.
- ChE majors are required to complete 3 hours of fine arts, 6 hours of serial work in the humanities, 6 hours of serial work in the social sciences and 3 additional hours of SS or Humanities.
- CS majors are required to complete 3 hours of sophomore literature (ENGL 221-226) plus 15 additional hours to satisfy the SS/H/FA requirement stated above.
- BE majors are required to complete 3 additional credit hours of SS/H/FA

### **Advising Recommendation**

Find the advising sheet for your major at: <https://engineering.olemiss.edu/advising/>

Review your advising sheet prior to meeting with your advisor to make the most of your advising session.



Common social science course work includes Anthropology, Economics, Political Science, Psychology and Sociology.

## Course / Title

ANTH 101 Introductory Cultural Anthropology  
 ANTH 102 Intro Archaeology and Bio Anthropology  
 ANTH 303 Cultural Anthropology  
 ANTH 304 Biological Anthropology  
 ANTH 305 Archaeology  
 ANTH 306 Archaeology of the Ancient Celts  
 ANTH 309 Indians of Mississippi and the South  
 ANTH 310 Peoples of the Pacific  
 ECON 202 Principles of Microeconomics  
 ECON 203 Principles of Macroeconomics  
 ECON 303 Money and Banking  
 ECON 307 Managerial Economics  
 ECON 310 Engineering Economy  
 ECON 312 Law and Economics  
 POL 101 Intro to American Politics  
 POL 102 Intro to Comparative Politics  
 POL 103 Intro to International Relations

## Course / Title

PSY 201 General Psychology  
 PSY 203 Self Mgmt. for Your Personal Life  
 PSY 301 Developmental Psychology  
 PSY 309 Learning  
 PSY 311 Abnormal Psychology  
 PSY 319 Brain and Behavior  
 PSY 320 Cognitive Psychology  
 PSY 321 Social Psychology  
 SOC 101 Introductory Sociology I  
 SOC 301 The Family, prerequisite  
 SOC 303 The Sociology of Death and Dying  
 SOC 307 Urban Sociology,  
 SOC 313 Social Movements,  
 SOC 315 Leisure and Popular Culture  
 SOC 317 The Sociology of Literature  
 SOC 321 Science, Technology and Society  
 SOC 325 Sociology of Gender

Common humanities course work includes Classics, Greek, Latin, English Literature, History, Modern Languages, Philosophy, Religion, Southern Studies, Gender Studies and African American Studies.

## Course / Title

GR 101 Introduction to Greek I  
 GR 102 Introduction to Greek II  
 GR 201 Intermediate Greek I  
 GR 202 Intermediate Greek II  
 GR 321 Greek Prose  
 GR 336 Greek Tragedy  
 LAT 101 Introduction to Latin I  
 LAT 102 Introduction to Latin II  
 LAT 201 Intermediate Latin I  
 LAT 202 Intermediate Latin II  
 LAT 202 Intermediate Latin II

## Course / Title

LAT 332 Vergil  
 CLC 101 Introduction to Greek Civilization  
 CLC 102 Introduction to Roman Civilization  
 CLC 103 Women in Antiquity  
 CLC 104 Sports in the Ancient World  
 CLC 106 Classical Mythology  
 CLC 303 Greek and Roman Tragedy  
 CLC 308 Survey of Roman Literature  
 CLC 313 The Roman Republic  
 CLC 314 The Roman Empire

## Common Humanities (continued)

### Course / Title

CLC 316 Bronze Age Greek, Aegean Art & Architecture  
CLC 320 Greek Architecture  
CLC 325 Topics in Classic Civilization  
CLC 327 Greek and Roman Religion  
ENG 221 Survey of World Literature to 1650  
ENG 222 Survey of World Literature since 1650  
ENG 223 Survey of American Literature to the Civil War  
ENG 224 Survey of American Literature since the Civil War  
ENG 225 Survey of British Literature from the Beginning - 18th Century  
ENG 226 Survey of British Literature from the Romantic Period to the Present  
HST 120 History of Europe to 1648  
HST 121 History of Europe since 1648  
HST 130 The United States to 1877  
HST 131 The United States since 1877  
HST 301 Colonial America  
HST 303 U.S. History, 1789-1850: The Emerging Nation  
HST 304 U.S. History, 1877-1918: The Nation Redefined  
HST 305 The United States, World War I-1945  
HST 306 The United States Since 1945  
A AS 107 Introduction to African History  
A AS 201 African American Experience  
PHIL 101 Introduction to Philosophy  
PHIL 102 Introduction to Professional Ethics  
PHIL 103 Logic: Critical Thinking  
PHIL 301 History of Philosophy I  
PHIL 302 History of Philosophy II  
REL 101 Introduction to Religion  
REL 102 Introduction to Asian Religions  
REL 103 Intro to Judaism, Christianity and Islam  
REL 310 The Old Testament and Early Judaism  
REL 312 The New Testament and Early Christianity  
S ST 101 Introduction to Southern Studies I  
S ST 102 Introduction to Southern Studies II  
G ST 103 Women in Antiquity  
G ST 201 Introduction to Gender Studies  
G ST 301 Topics in Gender and Culture  
G ST 303 The Family  
\*ALL Modern Languages

Common fine arts, course work includes lecture-based courses in the history, appreciation and theory of art, dance, music and theatre arts. Studio type courses such as band, acting, dance, drawing, etc. are not included.

#### Course / Title

AH 101 Introduction to Western Art  
 AH 102 Introduction to Non-Western Art  
 AH 201 History of Art I  
 AH 202 History of Art II  
 AH 316 Bronze Age Greek and Aegean  
       Arts and Architecture  
 AH 320 Greek Architecture  
 AH 343 North Renaissance Art  
 AH 354 Art Nouveau, Art Deco  
       & Streamlining  
 AH 355 20th Century Art  
 AH 386 African and African American Arts  
 AH 394 Mesoamerican Art  
 AH 330 Medieval Art

#### Course / Title

AH 351 19th Century European Art  
 AH 362 Folk Arts of the Americas  
 MUS 101 Introduction to Music Literature  
 MUS 102 Fundamentals of Music Theory  
 MUS 103 Introduction to Music  
 MUS 104 Intro to World Music Cultures  
 MUS 301 History of Music I  
 MUS 302 History of Music II  
 THEA 201 Appreciation of the Theatre  
 DANC 200 Appreciation of Dance

*NOTE: Courses emphasizing the enhancement of skills and performance are not acceptable. Only lecture-based courses in the fine arts may be applied to degree requirements.*

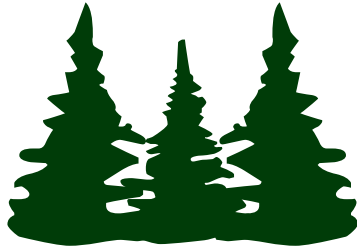
General education course work includes select military leadership courses, chancellor's leadership, select business courses and speech.

#### Course / Title

AS 301 Air Force Leadership Studies I  
 AS 302 Air Force Leadership Studies II  
 BUS 250 Legal Environment of Business  
 BUS 271 Business Communications  
 EDLD 110 Chancellor's Leadership Class I  
 EDLD 111 Chancellor's Leadership Class II  
 EDLD 120 Introduction to Leadership Studies  
 EDLD 220 Foundations of Leadership Studies  
 ENGR 390 Professional Communication for Engineers  
 ENGR 400 Leadership Professionalism in Engineering  
 MGMT 371 Principles of Management  
 GB 370 Entrepreneurship and Management  
 MSL 102 Basic Leadership & Management  
 NSC 211 Naval Leadership and Management I  
 SPCH 102 Fundamentals of Public Speaking  
 SPCH 105 Business and Professional Speech

## Fall 2019

Date(s)	Event(s)
March 18 – April 8	Academic Advising (for all summer terms and fall)
April 1 – April 15	Priority Registration (for all summer terms and fall)
April 1 – July 31	Phase 1 registration period
July 19	Application for first-time enrollment should be submitted no later than this date.
July 31	Fall 2019 tuition and fees posted to students' accounts.
August 1	\$50 registration fee assessed this date. Phase 2 registration.
August 15	Excess financial aid distributed to students via direct deposit or mail.
August 25	Last day to officially cancel registration and avoid responsibility for payment of tuition and fees.
August 26	Classes begin; registration fee (\$100) assessed this date; 100% refund (less 5% of fees or \$100, whichever is less) on withdrawals through September 9. Phase 3 registration.
August 30	Students may add courses on a space available basis through this date.
August 30	Deadline for course withdrawals – Law classes only (between August 31 and September 9 may drop only with instructor's approval).
September 2	LABOR DAY HOLIDAY (Administrative Offices closed.)
September 9	Last day to register or add classes (between August 31 and September 9 may add only with instructor's approval.) Refund period ends.
September 9	Deadline for course withdrawals – Law Classes only.
September 10	\$10 fee assessed per drop or add.
September 16	Mandatory drop date for non-attendance.
October 7	Last day to submit applications for December diplomas.
October 7	Deadline for course withdrawals (no refund; refund period ended September 9).
October 7	Midterm grades due.
Oct 14 – Nov 4	Academic Advising (for winter session and spring)
Oct 26 – Nov 11	Priority Registration (for winter session and spring)
Oct 26 – Nov 30	Phase 1 registration period (for winter session and spring)
November 23 – Dec 1	THANKSGIVING HOLIDAYS (Administrative Offices closed Thursday and Friday.)
December 2	Classes resume at 8:00 a.m.
December 6	Classes end.
December 9 – 13	Final Examinations



# WOODS SOCIETY

makes these possible

Engineers Without Borders travel to Togo

The annual publication of Ole Miss Engineer

Conference fees and travel for student representatives

Orientation leaders

Hydration station – filter water stations

Emergency living assistance to students

You may make an ongoing or one time donation to Woods Society at

*[engineering.olemiss.edu/woods/giving.html](http://engineering.olemiss.edu/woods/giving.html)*

Read more about the Woods Society

*[news.olemiss.edu/mike-emily-williams-spread-wealth-woods-society/](http://news.olemiss.edu/mike-emily-williams-spread-wealth-woods-society/)*

