SCHOOL OF
# ENGINEERING
UNIVERSITY OF MISSISSIPPI | 1900

# STUDENT HANDBOOK
2019–2020


Photo by Kevin Bain / Ole Miss Digital Imaging Services


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

Founded in 1900, Ole Miss's School of Engineering is the oldest engineering school in the state and the third oldest school at the university.

## Our Mission

The School of Engineering capitalizes on its engineering science tradition, its low student-to-faculty ratio and the liberal arts environment of the University of Mississippi to give our graduates the abilites 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.

We strive 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.
3. Provides practicing professionals with continuing education opportunities.



# WELCOME to the School of ENGINEERING!

Here at Ole Miss, you'll gain the skills to solve many of the world's problems – with the support and challenge from our teachers and alumni. That could be the technology that powers your home to the fuel, roads and vehicle that get you to work or play. Or the laptop or phone that gives you access to a world of knowledge and fun to the medical advancements that improve your life.

And, you'll have all sorts of opportunities to develop the leadership, communication and creative-thinking skills needed in today's competitive world. You'll be among academic achievers – several of our graduates have gone on to become Rhode Scholars, Fulbright Scholars, Guggenheim Fellows and Goldwater Scholars.

With our internship and co-op program, you can work side by side with seasoned engineers and other professionals on projects that might range from design to manufacturing to sales. You could find your spot, like many of our students, at places such as FedEx, Tesla or NASA.

Your teachers go beyond classroom instruction and tutoring sessions to give you career guidance and connections. Two-thirds of our graduates go into the private sector – taking positions in a wide variety of companies such as Amazon, ExxonMobil, International Paper and Kiewit. One out of every five students choosesto pursue another degree, whether in engineering, med school, law school or an MBA. And, others pursue work in the government or military.

So, check out our website, come visit the Ole Miss campus and wander through the charming city of Oxford. We're sure that you'll find everything you need to have a great college experience.

# Office of the Dean

**David Puleo, Ph.D.**
Dean
227 Brevard
662-915-7407
dpuleo@olemiss.edu

**Marni R. Kendricks**
Associate Dean
Undergraduate Academics
217 Brevard
662-915-5373
mckendri@olemiss.edu

**Greg Easson, Ph.D.**
Associate Dean
Graduate Programs
111 Brevard
662-915-5995
geasson@olemiss.edu

**Tyrus McCarty, Ph.D.**
Assistant Dean
Special Initiatives
203 Carrier Hall
662-915-5377
mccarty@olemiss.edu

**Ryan Upshaw**
Assistant Dean
Student Services
214 Brevard
662-915-7007
rlupshaw@olemiss.edu

**Isabella Watt**
Academic Common
Market
202 Brevard
662-915-2952
iwatt@olemiss.edu

**Megan Miller**
Career Planning
218 Brevard
662-915-5699
megan2@olemiss.edu

**Oana Chirila-Najjar**
Academic Counselor
204 Brevard
662-915-1983
ocnajjar@olemiss.edu

**Hank Ducey**
Assistant to the Dean
227 Brevard
662-915-5780
hanking@olemiss.edu

**Christine Hellums**
Administrative Secretary II
227 Brevard
662-915-7407
chellums@olemiss.edu

**Jeff Hubbard**
Network Administrator
104 Carrier Hall
662-915-8988
jahubbar@olemiss.edu

**William Panlener**
Systems Programmer
104 Carrier Hall
662-915-8988
wepanlen@olemiss.edu



# Departments

## BIOMEDICAL ENGINEERING

**Academic Director:** Dwight Waddell, Ph.D.
237 Brevard
662-915-2623
waddell@olemiss.edu

**Office Contact:** Andrew Stapp
237 Brevard
662-915-2623
pastapp@olemiss.edu

## CHEMICAL ENGINEERING

**Chair:** Adam Smith, Ph.D.
136 Anderson
662-915-5350
aes@olemiss.edu

**Office Contact:** Anne Pringle
134 Anderson Hall
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
106 Carrier Hall
662-915-7191
lmtrusty@olemiss.edu

## COMPUTER AND INFORMATION SCIENCE

**Chair:** Dawn Wilkins, Ph.D.
203 Weir Hall
662-915-7309
dwilkins@cs.olemiss.edu

**Office Contact:** Jennifer Vaughn
201 Weir Hall
662-915-7396
dept@cs.olemiss.edu

## COMPUTER ENGINEERING and ELECTRICAL ENGINEERING

**Chair:** Ramanarayanan Viswanathan, Ph.D.
320 Anderson Hall
662-915-5353
viswa@olemiss.edu

**Office Contact:** Stefanie Delmastro
302 Anderson Hall
662-915-7231
sdelmast@olemiss.edu

## GENERAL ENGINEERING

**Director:** Adam Smith, Ph.D.
136 Anderson
662-915-5350
aes@olemiss.edu

**Office Contact:** Anne Pringle
134 Anderson Hall
662-915-7023
abpringl@olemiss.edu

## GEOLOGICAL ENGINEERING & GEOLOGY

**Chair:** Gregg R. Davidson, Ph.D.
120 Carrier Hall
662-915-5824
davidson@olemiss.edu

**Office Contact:** Sherra Jones
120 Carrier Hall
662-915-7498
sdj1@olemiss.edu

## MECHANICAL ENGINEERING

**Chair:** A.M. Rajendran, Ph.D.
229A Carrier Hall
662-915-5770
raj@olemiss.edu

**Office Contact:** Janet McBride
229 Carrier Hall
662-915-7219
jlmcbrid@olemiss.edu

# Student Organizations

## HONOR SOCIETY & STUDENT BODY

### TAU BETA PI
(National Honor Society)

**Adviser:** Marni R. Kendricks
662-915-5373
mckendri@olemiss.edu

### ENGINEERING STUDENT BODY
(ESB)

**Adviser:** Ryan Upshaw
662-915-7007
rlupshaw@olemiss.edu

## 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
csurbeck@olemiss.edu

## COMPUTER AND INFORMATION SCIENCE

### ASSOCIATION FOR COMPUTING MACHINERY
(ACM)

**Adviser:** Adam Jones, Ph.D.
662-915-7057
jajone13@olemiss.edu

### UPSILON PI EPSILON
(National Honor Society)

**Adviser:** Joseph Carlisle
662-915-7784
jcarlis1@olemiss.edu

## ELECTRICAL ENGINEERING

### INSTITUTE OF ELECTRICAL & ELECTRONIC ENGINEERS
(IEEE)

**Adviser:** Paul Goggans, Ph.D.
662-915-5379
goggans@olemiss.edu

### ETA KAPPA NU
(National Honor Society)

**Adviser:** W. Elliot Hutchcraft, Ph.D.
662-915-6934
eeweh@olemiss.edu

## GEOLOGY & GEOLOGICAL ENGINEERING

### AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS
(AAPG)

**Adviser:** Louis Zachos, Ph.D.
662-915-8827
lgzachos@olemiss.edu

### ASSOCIATION OF ENGINEERING GEOLOGISTS
(AEG)

**Adviser:** Gregory L. Easson, Ph.D.
662-915-5995
geasson@olemiss.edu

### SIGMA GAMMA EPSILON
(National Honor Society)

**Adviser:** Jennifer Gifford Ph.D.
662-915-2079
jngiffor@olemiss.edu

## MECHANICAL ENGINEERING

### AMERICAN SOCIETY OF MECHANICAL ENGINEERS
(ASME)

**Adviser:** P.R. Mantena, Ph.D.
662-915-5990
meprm@olemiss.edu

### SOCIETY OF AUTOMOTIVE ENGINEERS
(SAE)

**Adviser:** T. Pandya, Ph.D.
662-915-5378
tspandya@olemiss.edu

## OTHER ORGANIZATIONS

### ENGINEERS WITHOUT BORDERS
(EWB)

**Adviser:** Lance Yarbrough
ldyarbrp@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

### SOCIETY OF AMERICAN MILITARY ENGINEERS
(SAME)

**Adviser:** Ned Mitchell, Ph.D.
kenneth.n.mitchell@usace.mil

# Frequently Asked Questions

## What are the department and related acronyms?

BME..... Biomedical Engineering
CE ..... Civil Engineering
ChE..... Chemical Engineering
CIS ..... Computer and Information Science
CPE..... Computer Engineering
GGE..... Geology and Geological Engineering
EE..... Electrical Engineering
ME ..... Mechanical Engineering
SOE..... School of Engineering

## 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,

| | | |
|---|---|---|
| MATH | 261 = 3-hr credits, | B |
| WRIT | 101 = 3-hr credits, | A |
| HIS | 105 = 3-hr credits, | F |
| CHEM | 105 = 3-hr credits, | B |
| CHEM | 115 = 1-hr credit, | D |
| ENGR | 100 = 3-hr credits, | A |

*Total Quality Points: (3)(3) + (3)(4) + (3)(0) + (3)(3) + (1)(1) + (3)(4) = 43*
*Credit Hours Attempted: 16*
*GPA Calculation: 43 quality points /16 hours = 2.68*

## 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.

## Where are each of the departments based?

Anderson Hall..... EE, ChE, CPE and General Engineering
Brevard Hall ..... Dean's Office, BME and research centers
Carrier Hall .....CE, GGE and ME
Weir Hall..... CIS
Center for Manufacturing Excellence..... CME

## 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.

## How do I know what courses to take?

Find the advising sheet for your major at: engineering.olemiss.edu/advising/
Review your advising sheet prior to meeting wuth your advisor to make the most of your advising session.

# Cooperative Education

Cooperative education provides students with the unique opportunity of working in a professional capacity for several months during their tenure as an undergraduate student. Co-ops are available in all programs within the School of Engineering.

The defined co-op work terms are fall, spring and full summer; these are the equivalent to a full academic load. The enrolled co-op student is considered full-time for insurance purposes and the deferment of loan repayment.

- Students desiring to participate in a co-op must obtain approval by his or her department chair.
- Co-op students must have an approved offer for at least 37.5 hours per week.
- Co-op students must be registered for C O P 300. The Engineering Dean's office will administratively enroll engineering co-op students.
- Co-op students must submit required documentation to the Engineering Dean's Office to remain in good standing.

Check out engineering.olemiss.edu/studentservices/coop

# Career Support

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-ops, internships or full-time positions. Upon enrollment, all engineering students will be granted a Handshake account and will be required to register with the University of Mississippi Career Center. They will be able to post their resumes on the employment website as well as search for position openings.

Students will also receive information about full time, internship and co-op positions from the School of Engineering Dean's Office and academic departments.

## Contact information - for co-ops and careers

**Megan Miller**

Career Planning Specialist
218 Brevard
662-915-5699
megan2@olemiss.edu



# Tutoring Services

The School of Engineering is highly committed to helping all students achieve their academic goals. Engineering 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
engineering.olemiss.edu/studentservices/tutor.html.

## Contact information - for tutoring and advisory services

**Oana Chirila-Najjar**

Academic Counselor
204 Brevard
662-915-1983
ocnajjar@olemiss.edu

# General Engineering

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

## 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.

See advisor for curriculum guidance in selecting your emphasis areas. Find the advising sheet for your major at: engineering.olemiss.edu/advising

Visit engineering.olemiss.edu/be

### Academic Program Director

Adam Smith, Ph.D., Assistant Professor
aes@olemiss.edu
136 Anderson



# Biomedical Engineering

- Biomedical Electronics
- Biomechatronics
- Bioinstrumentation
- Biomaterials
- Biomechanics
- Bionics
- Cellular, Tissue, & Genetic Engineering
- Clinical Engineering
- Medical Imaging
- Orthopaedic Bioenginering
- 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.

Visit biomedical.olemiss.edu

### Academic Program Director

Dwight Waddell, Ph.D., Associate Professor
waddell@olemiss.edu
237 Brevard

# Chemical Engineering

- 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, pharmaceutics 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

Visit engineering.olemiss.edu/chemical

### Department Chair

Adam Smith, Ph.D., Assistant Professor
aes@olemiss.edu
136 Anderson



# Civil Engineering

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

## 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!

Visit engineering.olemiss.edu/civil

### Department Chair

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

# Computer and Information Science

- 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.

Visit cs.olemiss.edu

### Department Chair

Dawn Wilkins, Ph.D., Professor
dwilkins@cs.olemiss.edu
201 Weir Hall



# Electrical and Computer Engineering

- Computer Engineering
- Robotics
- Utility Companies
- Radar Systems
- Manufacturing
- Aerospace
- Bio-Medical
- Electronic Chip Design
- Telecommunications
- Automotive
- RF/Wireless
- Water Quality
- Infrastrtucture
- Geospatial Analysis
- Foundations
- Green Buildings
- Nanotechnology
- Blast Protection
- Alternative Energy
- Pollution Contol

## 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.CP.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.

Visit engineering.olemiss.edu/electrical

### Department Chair

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

# Geology & Geological Engineering

- 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.

Visit engineering.olemiss.edu/gge

### Department Chair

Gregg R. Davidson, Ph.D., Professor
davidson@olemiss.edu
120 Carrier Hall



# 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.

See advisor for curriculum guidance in selecting your emphasis areas.

Visit engineering.olemiss.edu/mechanical

### Department Chair

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

# Academic Requirements

## FRESHMEN REQUIREMENTS

A student must be admitted to the University of Mississippi and meet certain academic requirements to be admitted into the School of Engineering.

To be admitted into **all engineering degrees programs except General Engineering**, a student must have earned:

- a 25 or higher on the Math portion of the ACT (or SAT equivalent or a C or higher on the Cambridge O-Level Examination) AND
- a core high school GPA of 3.0 or higher.

To be admitted into **General Engineering**, a student must have earned:

- a 20 or higher on the Math portion of the ACT (or SAT equivalent or a C or higher on the Cambridge O-Level Examination) AND
- a core high school GPA of 2.8 or higher.

Students with a score below 25 on the Math portion of the ACT must enroll in MATH 125 (or MATH 121 and 123) and earn a grade of B or higher.

## MINIMUM GPA TO GRADUATE

The School of Engineering requires, as a minimum, a 2.00 Grade Point Average:

- for all courses taken at Ole Miss.
- for all college work attempted at all institutions.
- for School of Engineering course work.

## DUAL ENROLLMENT / IB CREDIT / AP CREDIT

The School of Engineering recognizes credit earned by dual enrollment, International Baccalaureate and advanced placement courses in accordance with The University of Mississippi undergraduate catalog.

## ADVISING RECOMMENDATION

Find the advising sheet for your major at engineering.olemiss.edu/advising
Review your advising sheet prior to meeting with your advisor to make the most of your advising session.

## MINOR

The School of Engineering recognizes, but does not require, a minor course of study in a department different from the major.

A minor typically consists of 18 hours, unless otherwise specified. 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.

## 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.

## SOCIAL SCIENCES, HUMANITIES & FINE ARTS

The School of Engineering requires 18 hours of SS/H/FA courses.

- 6 credit hours in social/behavior sciences, 9 hours in humanities and fine arts with at least 3 hours in each 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.
- CIS majors are required to complete 3 hours of sophomore literature (ENGL 221-226) plus 15 hours to satisfy the SS/H/FA requirement stated above.
- BE majors are required to complete 3 additional credit hours of SS/H/FA

# Popular Courses

These are some of the courses that fulfill the SS/H/FA requirements for a degree from the School of Engineering

## SOCIAL SCIENCE

This includes courses taken in these departments:
Anthropology, Economics, Political Science, Psychology and Sociology.

| | |
|---|---|
| ANTH 101 | Introductory Cultural Anthropology |
| ANTH 102 | Intro Archaeology and Bio Anthropology |
| POL 101 | Intro to American Politics |
| POL 102 | Intro to Comparative Politics |
| POL 103 | Intro to International Relations |
| PSY 201 | General Psychology |
| PSY 203 | Self Mgmt. for Your Personal Life |
| SOC 101 | Introductory Sociology I |

## HUMANITIES

This includes courses taken in these departments
Classics, Greek, Latin, English Literature, History, Modern Languages, Philosophy, Religion, Southern Studies, Gender Studies and African American Studies.

| | |
|---|---|
| GR 101 | Introduction to Greek I |
| GR 102 | Introduction to Greek II |
| GR 201 | Intermediate Greek I |
| GR 202 | Intermediate Greek II |
| LAT 101 | Introduction to Latin I |
| LAT 102 | Introduction to Latin II |
| LAT 201 | Intermediate Latin I |
| LAT 202 | Intermediate Latin II |
| CLC 101 | Introduction to Greek Civilization |
| CLC 102 | Introduction to Roman Civilization |
| CLC 103 | Women in Antiquity |
| CLC 104 | Sports in the Ancient World |



# Popular Courses

## HUMANITIES *(continued)*

| | |
|---|---|
| GR 101 | Introduction to Greek I |
| GR 102 | Introduction to Greek II |
| GR 201 | Intermediate Greek I |
| GR 202 | Intermediate Greek II |
| LAT 101 | Introduction to Latin I |
| LAT 102 | Introduction to Latin II |
| LAT 201 | Intermediate Latin I |
| LAT 202 | Intermediate Latin II |
| 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 |
| 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 |
| 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 |
| REL 101 | Introduction to Religion |
| REL 102 | Introduction to Asian Religions |
| REL 103 | IntroDUCTION to Judaism, Christianity and Islam |
| 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 |
| ALL | Modern Languages |

*(continued on next page)*

# Popular Courses

## FINE ARTS

This includes lecture-based courses taken 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 applicable for an engineering degree.

| | |
|---|---|
| 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 |
| MUS 101 | Introduction to Music Literature |
| MUS 102 | Fundamentals of Music Theory |
| MUS 103 | Introduction to Music |
| MUS 104 | Intro to World Music Cultures |
| THEA 201 | Appreciation of the Theatre |
| DANC 200 | Appreciation of Dance |

## GENERAL EDUCATION

This includes select courses in military leadership, chancellor's leadership, business and speech.

| | |
|---|---|
| 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 |



# Notes

# Notes

SCHOOL OF
**ENGINEERING**

UNIVERSITY OF MISSISSIPPI | 1900

227 Brevard Hall | P.O. Box 1848 | University, MS 38677 | 662-915-7407

engineering.olemiss.edu

@olemissengineering