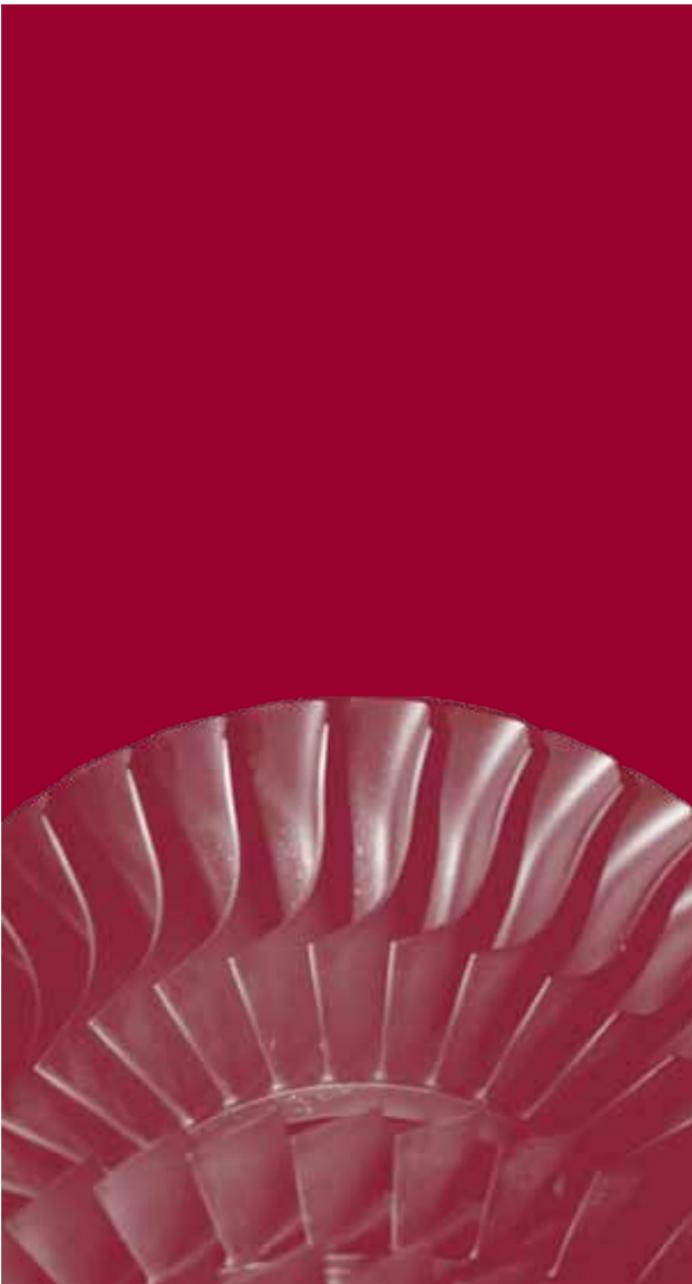




# MECHANICAL ENGINEERING

Graduate Studies at Mississippi State



# WHY CHOOSE MISSISSIPPI STATE?

MSU has been **dedicated to engineering** and **research** since its establishment in 1878.

The MSU College of Engineering **research expenditures total \$60 million per year\***.

The Mechanical Engineering (ME) department currently has over **65 graduate students** and **21 faculty members\***.

Most faculty members have **extensive industrial experience**.

Nearly all ME graduate students hold **paid assistantship positions** and receive **full tuition waivers**.

\*2007 figures

MSU's 2006  
Formula SAE car



## GRADUATE RESEARCH

The importance of research in graduate education is paramount, which is why every graduate student in the Mechanical Engineering department is involved in sponsored research projects. Current research topics include:

- Sustainable and renewable energy systems
- Multi scale materials modeling
- Computational fluid dynamics
- Materials processing
- Heat exchangers and heat transfer enhancement
- Fatigue and failure
- Internal combustion engines
- Composite development
- Vibrations
- Acoustics
- Applied engineering statistics
- Heating, ventilating, and air conditioning
- Friction stir welding and processing

Many interdisciplinary projects are conducted at research centers throughout Mississippi State University, such as the **Center for Advanced Vehicular Systems** ([www.cavs.msstate.edu](http://www.cavs.msstate.edu)), the **Sustainable Energy Research Center** ([www.serc.msstate.edu](http://www.serc.msstate.edu)), the **Computational Simulation and Design Center** ([www.simcenter.msstate.edu](http://www.simcenter.msstate.edu)), or the **Micro-CHP and Bio-fuel Center** ([www.microchp.msstate.edu](http://www.microchp.msstate.edu)).



# ADMISSIONS

Graduate admissions decisions are made on an individual basis. The major requirements for admission include:

- A good academic transcript (B average or better)
- Three letters of recommendation
- Graduate Record Examination (GRE) is required for international students or students without an ABET accredited undergraduate degree in Engineering
- With some exceptions, TOEFL is required of international students

The complete application can be found online at:  
[www.msstate.edu/dept/grad/admissions/](http://www.msstate.edu/dept/grad/admissions/)

# COMPLETION REQUIREMENTS

Graduate program completion requirements include:

## MS - Master of Science Thesis Option

- Complete 24 credit hours of coursework
- Complete 6 credit hours of research/thesis
- Submit and defend thesis

## MS - Master of Science Non-Thesis

- Complete 33 credit hours of coursework

## PhD - Doctor of Philosophy

- Students must take the ME Ph.D. qualifying exam within 24 months of their admission to the Ph.D. program
- Complete at least 42 hours of course work with up to 6 hours of Directed Individual Studies (DIS) as recommended by the student's committee
- Successfully present dissertation proposal
- Submit and defend dissertation



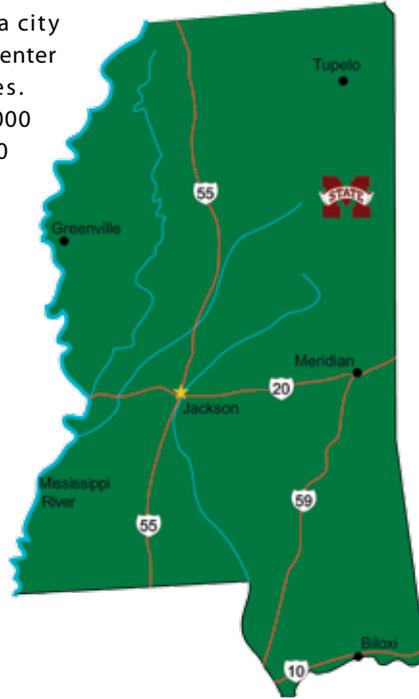
# LIFE AT MSU

Student life at MSU is very dynamic with more than 300 student organizations representing a wide spectrum of hobbies and interests. Students can enjoy the great outdoors, arts, entertainment, sports, and dining, as well as a vibrant social life.



## A GREAT LOCATION

Mississippi State University is located in rapidly growing Starkville, a city of approximately 25,000 in the center of the southern United States. The university enrolls about 16,000 students, employs more than 1,000 faculty members, and awards some 3,000 degrees per year.



### Distance from MSU (in miles)

Memphis	165
Atlanta	292
New Orleans	290
Pensacola	297
Nashville	250
Birmingham	150
Little Rock	321
Dallas	529
Houston	595
Mobile	231
Biloxi	259
Tupelo	66
Jackson	128
Greenville	140
Meridian	96



Students on Main Campus

## A SPRINGBOARD TO SUCCESS

After graduation our Mechanical Engineering graduate students move on to begin successful careers in academia, industry, and research labs. Most students have job offers before graduation. Employers of our recent graduates include:



### Industry

Shell Oil Company (Houston, TX)  
 Cascade Energy Engineering (Portland, OR)  
 Bell Helicopter (Fort Worth, TX)  
 Northrop Grumman (Pascagoula, MS)  
 Aerojet (Sacramento, CA)  
 Dresser (Addison, TX)  
 Boeing (Seattle, WA)  
 Volvo (Greensboro, NC)  
 Lockheed Martin (Slidell, LA)  
 Eaton Aerospace (Jackson, MS)  
 Whitbybird Engineers (London, England)  
 Intel (Penang, Malaysia)



### Research Labs

DOE National Renewable Energy Lab (NREL)  
 SouthWest Research Institute  
 Eglin Air Force Base  
 NASA Marshall Space Flight Center  
 Naval Sea Systems Command



### Academia

University of Idaho  
 University of Illinois, Carbondale  
 University of Tennessee, Chattanooga  
 Mississippi State University

# NEED MORE INFORMATION?

Additional information can be obtained from the following sources:

## **Graduate Coordinator**

Department of Mechanical Engineering  
Mail Stop 9552, 210 Carpenter Building  
Mississippi State University  
Mississippi State, MS 39762

Telephone: 1.662.325.3260

Fax: 1.662.325.7223

E-mail: [graduate@me.msstate.edu](mailto:graduate@me.msstate.edu)

website: [www.me.msstate.edu](http://www.me.msstate.edu)

Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status.

**MISSISSIPPI STATE**  
**UNIVERSITY**

