RESEARCH AND CORPORATE PARTNERSHIPS

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NUMBERS AT A GLANCE

Faculty . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 170
Undergraduates . . . . . . . . . . . . . . . . . . . . . . . . . . . 2,803
MS students . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 189
PhD students . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 393

Degrees awarded
BS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 535
MS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 107
PhD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 49

Active grants . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 492
Research expenditures (FY 2007–08) . . . . . . . $35,019,000

FOR MORE INFORMATION

Satish Udpa, Dean
College of Engineering • Michigan State University
3410 Engineering Building • East Lansing, MI 48824
Phone: (517) 355-5113 • Fax: (517) 355-2288
Web site: http://www.egr.msu.edu/
THE COLLEGE OF ENGINEERING

The College of Engineering is one of the largest and oldest colleges on the MSU campus. What began as a single field of study—Mechanic Arts—in 1885 has grown to a six-department college with 170 faculty and nearly 3,000 undergraduate students. Nine undergraduate degree programs are offered, plus the opportunity to further pursue special interests with a variety of concentrations and cognates, ranging from biomedical engineering to environmental engineering to supply chain management. Nine graduate degree programs are available.

What sets Spartan Engineers apart is the way their skills are put together. We believe that being an engineer in the twenty-first century means more than just developing, designing, and building. All engineers do that, and Spartan Engineers are no exception. But at MSU, a process we call Spartanering prepares our graduates to open the doors to designing, and building. All engineers do that, and Spartan

DEPARTMENTS

• Biosystems and Agricultural Engineering
• Chemical Engineering and Materials Science
• Civil and Environmental Engineering
• Computer Science and Engineering
• Electrical and Computer Engineering
• Mechanical Engineering

RESIDENTIAL EXPERIENCE

The Residential Experience for Spartan Engineering is a living-learning community that couples intensive classroom study with hands-on learning. Special seminars, tutoring, reserved class sections, and networking opportunities are just a few of the advantages of the Residential Experience.

UNDERGRADUATE PROGRAM

Approximately 3,000 undergraduate students are enrolled and nearly 600 bachelor’s degrees are awarded annually in applied engineering sciences, biosystems engineering, chemical engineering, civil engineering, computer engineering, computer science, electrical engineering, materials science and engineering, and mechanical engineering.

GRADUATE PROGRAM

Each year, approximately 600 students are enrolled in our advanced degree programs and nearly 200 MS and PhD degrees are awarded. Graduate programs are offered in biosystems engineering, chemical engineering, civil engineering, computer science, electrical engineering, environmental engineering, materials science, mechanical engineering, and engineering mechanics.

COLLEGE HIGHLIGHTS

• The Composite Vehicle Research Center is a center of excellence for the design and testing of composite structures for lightweight, environmentally friendly, durable, and safe vehicles, with both military and civilian applications. Funding sources include the Office of Naval Research; the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) in Warren, Michigan; and the Army Research Laboratory.

• The Structural Fire Testing Facility is the first of its kind in a U.S. university setting. The facility draws faculty from other institutions and government agencies to work collectively with faculty here at MSU in developing new materials, sensors, and design methodologies that will ensure that our infrastructure withstands natural and man-made fires.

• The Center for Spartan Engineering assists students in obtaining their career goals through research experience, cooperative education, internships, service learning, and post-graduation employment. The Center offers K-12 outreach activities as well as seamless career exploration and connections for students, alumni, employers, and faculty.

• The college will receive more than $12 million of the $125 million that MSU secured in partnership with nine years.

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• The College of Engineering has produced two Churchill Scholars and eight Goldwater Scholars in the past nine years.

• For more than 35 years, the Department of Chemical Engineering and Materials Science has had the nation’s best record for winning and placing in the American Institute of Chemical Engineers (AIChE) National Design Competition.

• Our graduates are recruited aggressively in Michigan and around the world by companies ranging in size from small startups to Fortune 500s. In addition, more than 250 employers and 350 undergraduates typically participate in experiential education opportunities each year.

• The study abroad program in Volgograd, Russia, is one of the largest study abroad programs among single-campus universities in the United States.

PRIORITY RESEARCH AREAS

• Health
• Energy
• Sustainability
• Security
• Materials

RESEARCH CENTERS AND FACILITIES

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• Composite Vehicle Research Center
• Electron Microscopy Facility
• Energy & Automotive Research Laboratories
• High Performance Computing Center
• MDOT Pavement Research Center of Excellence
• Midwest Hazardous Substance Research Center
• MSU Fraunhofer Center for Coatings and Laser Applications
• National Center for Pavement Preservation (NCP)
• NOAA Center of Excellence for Great Lakes and Human Health
• Protein Expression Lab
• Structural Fire Testing Facility
• ZELRI/MSU Power Research Center
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• Midwest Hazardous Substance Research Center
• MSU Fraunhofer Center for Coatings and Laser Applications
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