AT MSU, YOU MIGHT STUDY ENGINEERING 
BUT YOU’LL LEARN TO MAKE A BIG DIFFERENCE.

GRADUATE ENGINEERING PROGRAMS

MICHIGAN STATE UNIVERSITY

ENGINEERING

 CHOOSING YOUR OPPORTUNITY
Masters and Doctoral degrees are available in nine areas:

- Biosystems Engineering
- Civil Engineering
- Environmental Engineering
- Chemical Engineering
- Materials Science & Engineering
- Computer Science
- Mechanical Engineering
- Engineering Mechanics
- Electrical Engineering

CUSTOMIZE YOUR EXPERIENCE
At MSU, you can customize your engineering graduate degree by pursuing coursework outside your department and by engaging in interdisciplinary research with students and faculty across campus. MSU offers more than 40 interdisciplinary specializations for graduate students, in areas such as the environment, ecology, food, cognition, behavior, security, health, gender, ethics, humanities or the social sciences.

If you are interested in teaching at the college level (two- or four-year), you can choose to pursue Certification in College Teaching, which includes workshops on teaching and learning in college settings, development of a teaching portfolio, and a mentored teaching experience developed with guidance from faculty in the College of Engineering.

FINANCIAL SUPPORT
All applicants are automatically considered for fellowships, scholarships and assistantships (teaching and research). Most Ph.D. students receive full support for tuition, fees and a living stipend. Funding is more limited for M.S. students, although many find assistantships or other opportunities within their first year at MSU.

THINK BIG. THINK ENGINEERING.

THINK MSU.

ADMISSIONS
Each department makes its own admissions decisions, and requirements vary between programs. Detailed information is available through departmental websites (accessed from www.egr.msu.edu). All students must complete the MSU Graduate School Application (grad.msu.edu) and a supplemental application in GIMS, the Graduate Information Management System (www.gims.msu.edu/egr/apply/welcome.do).

FOR MORE INFORMATION
Dr. Katy Luchini Colbry
Director for Graduate Recruiting
colbryka@msu.edu
(517) 432-1064

FOR MORE INFORMATION
www.egr.msu.edu
grad.msu.edu
www.msu.edu

"I think the most fascinating questions are at the interface between disciplines. At MSU you have access to faculty and courses in many departments. There is tremendous opportunity and support for collaborative interdisciplinary work."

Heather Goldsby
Doctoral Student, Dual Ph.D.
Computer Science
Ecology, Evolutionary Biology & Behavior

FOR MORE INFORMATION
MSU College of Engineering
MSU Graduate School
Michigan State University

FOR MORE INFORMATION
www.egr.msu.edu
grad.msu.edu
www.msu.edu
I wanted a flexible graduate program that would allow me to explore coursework in other departments. With my adviser’s encouragement, I took a class in geostatistics that improved my research skills, and I took a journalism class to learn how to communicate important scientific concepts in ways that people without technical backgrounds can understand.

- Hassan Abbas
  Doctoral Student
  Civil Engineering

"I wanted to gain some work experience while going to grad school, and my faculty mentor helped me get an internship at Amazon.com. That experience helped me develop ideas for my dissertation project."

- Alok Watve
  Doctoral Student
  Computer Science

"As a graduate student, I had the opportunity to travel and present my work in Turkey, Italy, Canada, and throughout the USA. The project I worked on was also featured in New Scientist magazine."

- Ben Beckmann, Ph. D.
  MSU Class of 2010
  GE Global Research

"MSU really stresses collaboration. In my graduate classes the professors encourage us to work together and explore topics in more depth than in undergrad. I feel like the emphasis is on you as a student, and on your learning."

- Andrew Temme
  Doctoral Student
  Electrical Engineering

"Everyone was so welcoming, which is not something I expected at such a large university."

- Azizah Muhammad
  Masters Student
  Mechanical Engineering

BIG RESEARCH
With outstanding facilities and nearly $50 million in annual research expenditures, the MSU College of Engineering fosters cutting-edge, interdisciplinary research in a collaborative environment. Key research areas are highlighted below; see www.egr.msu.edu for a full list!

BIOSYSTEMS ENGINEERING
Food Quality, Safety and Biosecurity; Sustainable Ecosystems; Renewable Bioenergy Systems.

CHEMICAL ENGINEERING AND MATERIALS SCIENCE
Biobased Industrial Research; Biomaterials; Biotechnology; Colloid and Interface Science; Energy Production; Environmental Research; Materials (Ceramic, Electronic, Structural); Metabolic Engineering; Metallic Systems; Nanomaterials; Polymers; Rheology and Multiphase Flow; Separation Science; Sustainable Economy.

CIVIL AND ENVIRONMENTAL ENGINEERING
Structural, Materials, Pavement, Fire and Earthquake Engineering; Sensing for Infrastructure; Environmental Chemistry, Microbiology and Fluid Mechanics; Geoenvironmental Engineering; Hazardous Waste Management.

COMPUTER SCIENCE AND ENGINEERING
Artificial Intelligence; Computational Biology and Bioinformatics; Computer and Network Security; Computer Science Pedagogy; Computer Systems and Networks; Database Systems and Data Mining; Evolutionary Computing; High Performance Computing; Human Computer Interaction; Parallel Processing; Pattern Recognition and Image Processing; Software Engineering and Formal Methods; Theoretical Computer Science.

ELECTRICAL AND COMPUTER ENGINEERING
Biomedical; Communications and Signal Processing; Computer Engineering; Computer Networking; Controls; Electromagnetics; Electronic Materials and Devices; Power; Robotics; Integrated Microsystems; Evolutionary Computation.

MECHANICAL ENGINEERING
Automotive Engines; Computational Fluid Dynamics; Computational Solid Mechanics; Manufacturing; Fluid Mechanics; Heat Transfer and Thermodynamics; Mechanics; Systems and Controls; Turbo Machinery; Dynamics and Vibrations; Mechanical Systems; Engineering Mechanics; Thermal-Fluids Engineering.

BIG IMPACT
Engineering grad students collaborate with faculty and researchers across campus and around the world to explore our biggest challenges, like sustainability, security, materials, health and energy. MSU partners with national labs, Fortune 500 companies, government agencies and global universities; recent collaborations include NSF, NIH, Microsoft, Boeing, Chrysler, General Electric, Toyota, DuPont and NASA.

BIG RESULTS
With 170 faculty members in the College of Engineering and 5,000 faculty and academic staff on campus, Michigan State offers you a bigger group of mentors. Our graduate students regularly publish their research, participate in conferences and win major awards, such as NSF Graduate and Postdoctoral Fellowships.

BIG FUTURE
At MSU, you can customize your education with teaching, research or industry experiences. Our alumni go on to big companies, small startups and prestigious positions in academia and research. Recent placements include Dow, MIT Lincoln Labs, Google, Purdue, Cornell, Oak Ridge National Lab, ETH Zurich, and Carleton College.

BIG COMMUNITY
With more than 10,000 graduate and professional students, MSU is big enough for every interest. See a Broadway show, learn to scuba dive, or cheer the Spartans as they compete for a national championship! In 2010, Kiplinger named Lansing as one of the top 10 cities for young professionals, with great entertainment, a low cost of living, and high paying jobs, and The Scientist has consistently ranked MSU as one of the best places to work in academia.