WHO WILL ENGINEER THE FUTURE?

College of Engineering
Michigan State University

SPARTANS WILL.

Engineering is among the founding disciplines of Michigan State University. Today the MSU College of Engineering is the second largest academic unit at Michigan State University. MSU Engineering serves more than 7,000 students, with 10 bachelor’s degrees and 10 graduate degrees in areas of high demand such as computer science, mechanical engineering, material science, and environmental engineering among others.

Degrees granted by the college are among the most sought and valued in the marketplace. Working with partners in industry and government, we are developing the technology talent that will build the economy of Michigan and beyond.

ENROLLMENT REPORT

7,000
Engineering
STUDENTS

230
Tenure System
FACULTY

Graduating
1200+
ENGINEERS per year

97%
of graduates reported
a career outcome

100+
employers hired
MSU ENGINEERING
GRADUATES

61%
Employed in MICHIGAN

75%
Employed in the MIDWEST

$66,500
Approx. Average
STARTING SALARY

46%
reported receiving a
SIGNING BONUS

CAREER-RELATED CO-CURRICULAR ACTIVITIES

89%
participated in a
career-based activity
outside of class

23%
Co-op/Intern – for credit

66%
Co-op/Intern – non-credit

27%
Off-Campus Work

36%
On-Campus Work

4%
Work Abroad

1 2017 Fall Enrollment Report for the MSU College of Engineering.

2 2017 Destination Report data from 83% of graduating seniors receiving a bachelor’s degree from the MSU College of Engineering.
MSU ranked #32 in RESEARCH EXPENDITURES per year.

**FACULTY**
- Tenure-System Faculty: 230 (+65 in past 3 years)

**GRADUATE STUDENT ENROLLMENT**
- MS & PhD Students
- Women, Underrepresented & International Students

**ENGINEERING RESEARCH EXPENDITURES**
- Fiscal Year:
  - 2015-16: $49.1 Million
  - 2016-17: $56.5 Million
  - 2017-18: $59.7 Million

**FUNDING SOURCES**
- Federal Government: 60%
- State Government: 9%
- Foreign Governments: 5%
- Business & Industry: 18%
- Non-Profit Orgs. (e.g. foundations): 8%

**TOP FEDERAL FUNDING AGENCIES**
- Department of Defense
- Department of Energy
- National Science Foundation
- Department of Health and Human Services
- Department of Homeland Security/Justice
- Department of Transportation

**RESEARCH THRUSTS**
- ADVANCED MANUFACTURING: Just-in-time 3D printing, manufacturing automation, AI augmentation for quality control and process optimization.
- APPLIED ELECTROMAGNETICS: Research from sources to antennas, with applications in defense, communications, non-destructive evaluation, and consumer electronics.
- AI & BIG DATA: Machine learning, deep learning, etc., applied to logistics, optimization, business processes, decision support, industrial quality assurance.
- BIOMETRICS: Developing advanced systems to enhance recognition and authentication of persons using fingerprints, face recognition, iris, and gait.
- HEALTH/BIOMEDICAL: Human health, biomedical imaging and devices, biomechanics, and precision medicine.
- MATERIALS: Advanced composites joining, diamond devices, coatings, and electronics.
- MOBILITY: Connected & autonomous vehicles, smart infrastructure, user experience, testing & validation, connecting to law, and policy. mobility.msu.edu
- SMART AG: Applying technology to the food supply chain to enhance food safety and security, from soil and seed treatment to precision farming to smart packaging, and real-time quality/safety monitoring from farm to fork.

**ECONOMIC IMPACT**
- The College of Engineering is among MSU’s top producers of ideas for commercialization. Research discoveries are brought into a pipeline of patents, products and startup businesses that help build a diversified economy and jobs for Michigan.

**FISCAL YEAR**
- 2015-16: $49.1 Million
- 2016-17: $56.5 Million
- 2017-18: $59.7 Million

**INVESTMENT**
- $33M+ funding for startups
- 54 business incubations
- 25 businesses moving through incubation
- 9 startups launched
- 20+ patents issued per year
- $350K+ licensing revenue per year

*Reported expenditures for 2018 ($53,004,449) differ due to ASEE rule clarifications that changed accounting practices.