Mizzou Engineering
Becoming the College of Choice

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MU College of Engineering
College of Engineering
University of Missouri

Best Buy
School
According to Fiske Guide to Colleges

1 of just 10 universities with engineering, medical and veterinary medical colleges on the same campus nationwide

MU is home to the nation's most powerful research reactor located on a university campus

MU is home to the nation's oldest collegiate Engineers' Week celebration in the nation

#6 Best College for Safety Resources

Leadership Academy

113 Faculty

113 Academic Staff

1 Inclusivity Center

50+ Student Orgs

Average Starting Salary for COE Alum $57,100

2,747 Undergrad + 232 Master's + 284 Doctoral = 3,263 Total Enrollment

Home to 2 nationally funded centers

Average Freshman ACT Score 29.2

1 of just 10 universities with engineering, medical and veterinary medical colleges on the same campus nationwide

One of fewer than 40 engineering colleges nationwide with a female dean

Scholarships awarded by the College of Engineering for the 2016-2017 school year exceeded $1.3 million

FACULTY ARE INTERNATIONAL SCHOLARS FROM 17 DIFFERENT COUNTRIES

60%

24,648 Living Alumni

496 Current Presidents & CEOs

Dear [Name],

I am writing to express my interest in attending the University of Missouri, specifically the College of Engineering. I am particularly drawn to the university's reputation as a Best Buy School, as acknowledged by Fiske Guide to Colleges. The university's commitment to inclusivity, as evidenced by the Inclusivity Center, aligns with my values.

Moreover, the University of Missouri's ranking as the number 1 inact score (29.2) and its home to 2 nationally funded centers highlights its excellence in engineering, medical, and veterinary disciplines. The university's 8 Master's Programs and 7 Doctoral Programs offer a comprehensive range of educational opportunities, including 9 undergraduate degree programs.

The university's recognition as a leader in international scholarship, with 24,648 living alumni and 496 current presidents & CEOs, demonstrates its global impact and the achievements of its graduates.

I am particularly interested in the College of Engineering and its #6 ranking for safety resources. The Leadership Academy and inclusion of 2,747 undergraduate, 232 master’s, and 284 doctoral students in the total enrollment of 3,263 signifies the university's commitment to providing a quality education to diverse students.

Thank you for considering my application. I look forward to the opportunity to contribute to and benefit from the University of Missouri's community.

Sincerely,
[Your Name]
Facilities

• 3D Printing Lab

• https://www.youtube.com/watch?v=1sYq2i4upmI

• Materials Processing and Characterization Facility
Strategic Plan – Becoming the College of Choice

Overview

Values
- Interdisciplinary Activities/Collaboration
- Excellence in Education, Research, and Translation
- Integrity and Accountability

Pillars of Pursuit
- Educating Engineering Leaders
- Big Data Analytics
- Sustainability
- Biomedical Innovations

Strategic Priorities
- Promote a culture of integrity, accountability, excellence, and collaboration
- Research expenditures to $60M
- New space and infrastructure
- Double the number and improve quality and diversity of graduate students
- Endowment to $60M, Fundraising to $100M
- Improve undergraduate quality and diversity
- Interdisciplinary/collaborative research and student learning

Tactical Action Plans
Pillars of Pursuit

Educating Engineering Leaders

Big Data Analytics

Biomedical Innovations

Sustainability in FEWSed
MU Engineering Leadership, Engagement and Career Development Academy
College of Engineering

The Academy

MU COLLEGE OF ENGINEERING
W1024 LAFFERRE HALL
muecs@missouri.edu
What is the Academy?

• A way to grow your **leadership skills** and enhance your chances for employment.

• Our goal is to offer students more opportunities to interact with **industry** while they take advantage of enhanced career development services and professional development sessions.
  
  – Learning to Lead, Learning to Innovate, Conflict Resolution, Soft communication skills

• **Any student** in the MU College of Engineering is welcome to participate.
NSF Engineering Research Center (ERC)

• The goal of the ERC Program is to integrate engineering research and education with technological innovation to transform national prosperity, health, and security. ERCs create an innovative, inclusive culture in engineering to cultivate new ideas and pursue engineering discovery that achieves a significant science, technology, and societal outcome within the 10-year timeframe of NSF support (~$30M).

Need to address the following questions:

• What is the compelling new idea and how does it relate to national needs?
• Why is a center necessary to tackle the idea?
• How will the ERC's infrastructure integrate and implement research, workforce development and innovation ecosystem development efforts to achieve its vision?
ERC in Smart Cities

• **Target NAE’s Grand Challenges**
  – Restore and Improve Urban Infrastructure
  – Secure Cyberspace
  – Provide Access to Clean Water
  – Enhance Virtual Reality

• **NSF Big Ideas**
  – Mid-scale Research Infrastructure
  – The Future of Work at the Human-Technology Frontier
  – Harnessing the Data Revolution

• **NEEDS**
  – Engineers, social scientists, computer scientists, educational specialists, architects, ITs, psychologists, environmentalists, water quality specialists, natural scientists, ecologists, etc.

• **Contact:**
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NSF Materials Research Science and Engineering Center (MRSEC)

- Materials Research Science and Engineering Centers (MRSECs) provide sustained support of **interdisciplinary materials research and education** of the highest quality while addressing fundamental problems in science and engineering. MRSECS address research of a scope and complexity requiring the scale, synergy, and interdisciplinarity provided by a campus-based research center.
Center for Autonomous Materials Design and Innovation

• Mission/Vision – Fundamental, innovative research on responsive, autonomous materials, supporting interdisciplinary education and training

• Interdisciplinary Research Groups (IRGs)
  – Immuno-modulatory materials
    • Target specific materials that will elicit/control cellular responses
  – Self-directing nanostructured materials
    • Machine learning materials design
  – Atomically controlled manufacturing of nanomaterials
National Security Agency (NSA) Center of Academic Excellence

• In Cyber Operations

The CAE-Cyber Operations program is intended to be a deeply technical, interdisciplinary, higher education program firmly grounded in the computer science (CS), computer engineering (CE), and/or electrical engineering (EE) disciplines, with extensive opportunities for hands-on applications via labs/exercises.