CASE WESTERN RESERVE UNIVERSITY

Program Details

Online MS in Mechanical Engineering

The online Master of Science (MS) in Mechanical Engineering is designed to prepare you for management or research roles in fields ranging from robotics and aerospace to combustion science and biomanufacturing. Our novel curriculum is built on a collaborative, interdisciplinary approach to mechanical engineering, and it emphasizes technical areas including applied mechanics, dynamic systems, biomechanics, fluid mechanics, heat transfer and more. Develop your technical expertise and bolster your professional skill set to move into engineering leadership today.

Program Benefits

- Engage 100 percent online coursework to build your expertise in mechanical systems and design
- Strengthen your management potential with a curriculum designed to **augment your technical skills with professional acumen**
- Earn a practice-oriented degree that does not feature a required master's thesis
- Learn from renowned faculty with extensive leading-edge research experience, in an engineering school with a pedigree of excellence of **more than 130 years**
- Work collaboratively with classmates in select live online environments for group assignments
- Enjoy professional support, including entrepreneurial opportunities through CWRU LaunchNet and remote or in-person appointments with CWRU's innovative on-campus academic makerspace, Sears think[box]

Online Program Structure

- 30 credit hours
- 10 courses
  - 8 core courses
  - 2 electives
- Can be completed in as few as 18 months
- 3 annual starts: spring, summer and fall

Admissions Requirements

- Completed online application form
- **Bachelor's degree** (Bachelor of Science in engineering preferred)
- **Official transcripts**
- **GRE scores:** We have temporarily suspended the GRE requirement for spring-fall 2024 applicants
- **Personal statement** of one to two pages
- **Resume/CV**
- **Two letters of recommendation** from professional or academic sources (non-family)
- **Application fee:** $50 (Speak with an advisor about waiving your fee)
- **International Applicants: TOEFL, IELTS** or **PTE** scores*
  - We are suspending certain requirements for the spring 2024 terms. International applicants may be eligible for conditional admittance; please speak with your advisor to learn more.

*International students whose first language is not English must demonstrate English proficiency by submitting Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Pearson Test of English (PTE-Academic) scores. See our requirements for international applicants for details.

The Curriculum

Core Courses:

EPOM 400 Leadership and Interpersonal Skills

EMAE 450 Advanced Engineering Analysis

EMAE 456 Micro-Electro-Mechanical Systems in Biology and Medicine (BioMEMS)

EMAE 460 Theory and Design of Fluid Power Machinery

EMAE 480 Fatigue of Materials

EMAE 481 Advanced Dynamics I

EMAE 487 Vibration Problems in Engineering

EMAE 494 Energy Systems

Electives (Choose 2):

EPOM 405 Applied Engineering Statistics

EPOM 407 Engineering Economics and Financial Analysis

EECS 401 Digital Signal Processing

Join a new breed of engineering leaders. Transform your career.

Are you ready to move into a leadership or research role in the dynamic field of mechanical engineering? Learn more about our online MS in Mechanical Engineering program by reaching out to an Admissions Outreach Advisor at 855-500-3840 or admissions.case@elearningctr.com.