

Online MS in Systems and Control Engineering

The [online Master of Science \(MS\) in Systems and Control Engineering](#) prepares you to manage and conduct research across a variety of systems applications. Housed in the Department of Electrical Engineering and Computer Science, the MS in Systems and Control Engineering offers a robust curriculum that touches on research areas that include bioinformatics, data mining and visualization, systems biology, wind turbine systems and control, computer engineering, and more. This highly customizable degree combines professional skills development with training in the technical area of your choosing.

Program Benefits

- Engage [100 percent online coursework](#) to build your expertise across systems and control applications
- 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 the same renowned faculty who teach in our engineering programs on campus and benefit from their years of leading-edge research experience
- 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
 - 5 core courses
 - 5 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

EECS 401 Digital Signal Processing

EECS 407 Engineering Economics and Financial Analysis

EECS 408 Introduction to Linear Systems

EECS 416 Convex Optimization for Engineering

Electives (Choose 5):

EECS 404 Digital Control Systems

EECS 411 Applied Engineering Statistics

EECS 468 Power System Analysis I

EMAE 450 Advanced Engineering Analysis

EMAE 481 Advanced Dynamics I

EMAE 487 Vibration Problems in Engineering

EMAE 494 Energy Systems

EBME 410 Medical Imaging Fundamentals (Imaging)

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

Are you ready augment your technical systems and control knowledge and move into a leadership or research role? Learn more about our online MS in Systems and Control Engineering program by reaching out to an Admissions Outreach Advisor at 855-500-3840 or admissions.case@elearningctr.com.