

In industry, your success is highly dependent on your client's success. Integral to the coursework, I mentor students to recognize attributes that the client values such as quality, resourcefulness, foresight, and taking initiative—the ability to understand why your work is important to the mission.

DR. TONY BARBER
FACULTY, SYSTEMS ENGINEERING

TOP SYSTEMS ENGINEERING ROLES

- Systems Engineer
- RF Electrical Engineer
- Reliability Engineer
- Transmission Engineer
- Senior Project Engineer
- Manufacturing Engineer

TOP STUDENT EMPLOYERS

- Accenture
- U.S. Food and Drug Administration
- General Motors
- Intelsat
- Lockheed Martin
- Northrop Grumman
- Textron
- U.S. Navy



A. JAMES CLARK
SCHOOL OF ENGINEERING

The A. James Clark School of Engineering is a catalyst for high-quality research, innovation, and learning, providing students the resources to be engaged problem-solvers and entrepreneurial thinkers. Pursue a degree tailored to your career interests through the top-ranking Maryland Applied Graduate Engineering programs.

DON'T WAIT TO FURTHER YOUR CAREER



MARYLAND APPLIED
GRADUATE ENGINEERING

FOR MORE INFORMATION

We welcome your interest. For complete information, including course descriptions, deadlines, and schedules please contact us.

WEBSITE: mage.umd.edu

TEL: 855-309-8379

EMAIL: mage@umd.edu

GRADUATE ENGINEERING DEGREES IN

SYSTEMS ENGINEERING

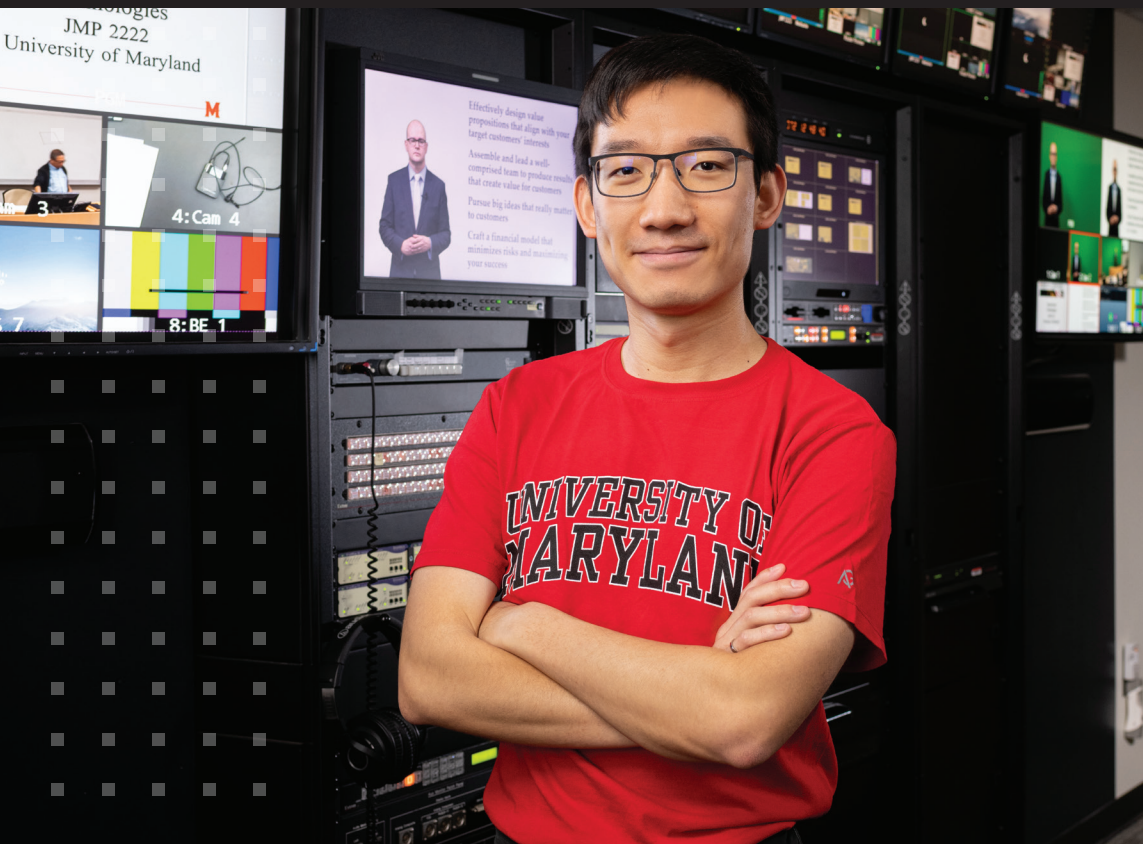
Gain the analysis and design capabilities to plan, create, test, and deploy systems.

DON'T WAIT TO FURTHER YOUR CAREER

Discover how Maryland Applied Graduate Engineering (MAGE) programs prepare you to solve the most daunting engineering challenges and give you a competitive edge in today's market.

- Focus on a specialized area of engineering and target coursework to your interests.
- Learn from industry leaders who incorporate the latest education tools to create collaborative, interactive learning environments.
- Balance work and family through the flexibility of online or in-person classes.
- Access student services online to quickly receive the support you need regarding admissions, financial aid, or career services.

A leader in graduate engineering education for professionals, we are proud to serve the region's engineering community. Through our programs, advance your career with a degree from the A. James Clark School of Engineering, consistently ranked among the top 20 in the U.S. Located just a few miles from Washington, D.C., Maryland Engineering is at the center of a constellation of high-tech companies and federal laboratories, offering students and faculty access to unique professional opportunities.



SYSTEMS ENGINEERING AT MARYLAND

Today's frontiers of engineering and system development have expanded largely because engineers have the tools to support system analysis and design. The University of Maryland's Institute for Systems Research (ISR) was a pioneer in creating these tools to address the need to analyze and simulate novel types of automated, distributed, adaptable, and economically competitive systems. Today, systems engineering is a highly interdisciplinary field that focuses on how to design, integrate, and manage complex systems throughout their life cycles. Systems engineers often overlap technical and management areas, drawing on the resources of a host of other engineering disciplines, including software, reliability, electrical, and mechanical engineering. Through the ISR, more than 60 faculty and other researchers from 13 departments in five colleges across the university develop basic methodologies and tools for a wide range of systems problems. ISR research partnerships include the National Science Foundation, the Department of Defense, NASA, and the Department of Energy as well as industry and the Maryland state government.

GRADUATE PROGRAMS IN SYSTEMS ENGINEERING

Systems are becoming more and more complex, creating an increasing demand for engineers prepared to lead in their development across fields and industries. The **Master of Engineering** and **Graduate Certificate in Engineering** programs prepare professional engineers to coordinate the planning, development, and creation of systems in fields like aerospace, telecommunications, neuroscience, robotics, and more. Master's degree students may choose to use their electives to obtain a certificate in one of the many other innovative programs offered by Maryland Applied Graduate Engineering. Elective courses cover design of experiments, advanced systems architecting, quality management systems, and Lean Six Sigma, a managerial approach to performance improvement. Students gain an understanding of new approaches to the implementation of modern, real-world systems. This program is ideal for students ready to direct and manage multidisciplinary complex systems across the engineering continuum.

ADMISSION REQUIREMENTS

- A bachelor's degree in a STEM field from an accredited institution
- GPA of 3.0 or better
- Successful completion of all of the following courses (or their equivalent):
 - Math: Calculus I and II
 - Familiarity with at least one programming language
- Two letters of recommendation (M.Eng applicants only)
- Unofficial copies of transcripts
- For international students: an official English proficiency score report
- Official GRE scores considered but not required
- Completed applications considered for admission on a case-by-case basis

DEGREE REQUIREMENTS

MASTER OF ENGINEERING

- 10 courses (30 Credits)
- No thesis / no research
- No comprehensive exam

GRADUATE CERTIFICATE IN ENGINEERING

- 4 courses (12 credits)

FULL LISTING OF COURSES

Visit mage.umd.edu/systems-engineering or scan here for more specific requirements, available courses, and degree planning sheets.



APPLICATION DEADLINES

ON-CAMPUS DOMESTIC

FALL July 31

SPRING December 15

SUMMER May 15

ON-CAMPUS INTERNATIONAL

FALL March 8

SPRING September 24

ONLINE DOMESTIC AND INTERNATIONAL

FALL July 31

SPRING December 15

SUMMER May 15

TAKE THE NEXT STEP

Are you ready to take the next step in your engineering career journey? Explore program options, application requirements, and deadlines through virtual and in-person open house sessions.

TO LEARN MORE, VISIT
mage.umd.edu/systems-engineering