Gain the tools to assess and help ensure the dependability and quality of products and systems throughout their life cycles.
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.
When deciding where to pursue a degree in reliability, there were only a few options. Maryland was the obvious choice due to its reputation in the field. The flexibility of asynchronous online classes also allows me as a full-time engineer to adjust my class time to fit in a busy work week.

JESSE BUTLER  
M.ENG., RELIABILITY FALL ’25

TOP RELIABILITY POSITIONS
- Manufacturing Plant Engineer
- Quality Engineer
- Reliability Design Engineer
- Safety Engineer
- Safety Instrumented Testing Engineer
- Senior Product Systems Engineer
- Site Reliability Engineer

TOP STUDENT EMPLOYERS
- Chevron
- General Electric
- Google
- Lockheed Martin
- Raytheon
- The MITRE Corporation
- U.S. Army
- U.S. Department of Defense
RELIABILITY AT MARYLAND

The A. James Clark School of Engineering’s graduate reliability engineering programs, some of the largest and most comprehensive programs in the field of reliability and risk analysis of engineered systems and processes, are aligned with the University of Maryland’s Center for Risk and Reliability (CRR). Created in 1985 as the umbrella organization for many of the risk and reliability research and development activities at the Clark School, CRR includes numerous research laboratories with extensive state-of-the-art equipment. Research covers a wide range of subjects involving systems and processes, including predictive reliability and human reliability analysis methods; advanced probabilistic inference methods; system-level health monitoring and prognostics; and risk analysis theory. The center is supported by the Department of Mechanical Engineering, the largest of the Clark School’s eight departments and ranked in the top 20 nationally by U.S. News & World Report.

GRADUATE PROGRAMS IN RELIABILITY

Increasing numbers of organizations are seeking risk and reliability assessments of complex systems as technologies continue to expand. Designed specifically for working engineers and technical professionals, this flexible graduate program provides students with the tools to identify and manage risks that can affect asset reliability and business operations with a focus on risk management, loss elimination, and lifecycle asset management. The Master of Engineering program is offered in collaboration with the Department of Mechanical Engineering and the CRR. In this multidisciplinary program, students learn to identify, manage, and eliminate product and system failures using advanced risk and reliability practices and data analysis techniques. Coursework in reliability engineering prepares students to improve performance and ensure safety in manufacturing, telecommunications, healthcare, and the energy sector. The four courses in the Graduate Certificate in Engineering allow students to focus on a concentrated area of study. Both programs prepare engineers to directly meet today’s risk and reliability challenges in government, the nonprofit sector, and private industry.

TAKE THE NEXT STEP
ADMISSION REQUIREMENTS

- A bachelor’s degree in engineering, computer science, physics, applied mathematics, physical sciences, or a related 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, II, and III, and Differential Equations
- Three 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/reliability 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

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/reliability
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
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EMAIL: mage@umd.edu