



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**

GRADUATE ENGINEERING DEGREES IN



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](http://mage.umd.edu)

TEL: 855-309-8379

EMAIL: [mage@umd.edu](mailto:mage@umd.edu)

# FIRE PROTECTION ENGINEERING

Acquire the expertise to address the challenges of preventing, controlling, and mitigating the effects of fire.

Being a fire protection engineer allows me to design systems that protect valuable assets; the most valuable being people. The forensic aspects of a fire investigation have always intrigued me and fire protection engineering allows me to provide my well informed opinion of the nature and cause of a fire event.

CASSANDRA STEPHENS  
M.ENG., FIRE PROTECTION ENGINEERING FALL '20

**TOP FIRE PROTECTION POSITIONS**

- Fire Protection Engineer
- Safety Engineer
- Consulting Engineer
- Project Engineer

**TOP STUDENT EMPLOYERS**

- BAE Systems
- Bechtel
- U.S. Department of Defense
- Jensen Hughes
- Jacobs Engineering
- National Park Service
- Saudi Aramco
- U.S. Nuclear Regulatory Commission

# 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.



## FIRE PROTECTION AT MARYLAND

The Department of Fire Protection Engineering was established in 1956 and offers the only fully accredited fire protection engineering undergraduate program and one of three graduate degree programs in the country. Our interdisciplinary program is led by the university's foremost experts in fire protection engineering as well as international experts from business and industry. Fire protection is a unique, public safety-oriented field of study within engineering designed to help students identify solutions to protect people, property, structures, the environment, and also the planet from the negative effects of fires. Faculty and students are involved in a wide array of fire-related research including fire and explosion safety in Lithium-ion batteries, fire safety at the wildland-urban-interface, fire safety in automated high-density storage warehouses, fire safety in mass timber buildings, fire and explosion safety in hydrogen systems, etc.

## GRADUATE DEGREES IN FIRE PROTECTION

Fire protection engineers are among the most sought-after professionals in the industry. By 2030, the demand for fire protection engineers is expected to increase by more than 5%. The Clark School's **Master of Engineering** and **Graduate Certificate in Engineering** programs represent the Department of Fire Protection Engineering's commitment to preparing engineers for the challenges of this rapidly growing field. Integrating engineering principles with fire science, students identify a course of study based on professional interests: fire behavior, development prediction, combustion, environmental effects, smoke management, evacuation, or other technical areas aligned with their interests. Designed with the working engineer in mind, the **Master of Engineering** program features a curriculum rich in the latest scientific and technological principles and practices, using state-of-the-art procedures and computer modeling in analysis and design. Students explore basic processes fire dynamics (both in the built environment and in the wildland), the flammability of materials, the effects of fire on structures and the environment, fire detection, fire smoke management, evacuation and tenability analysis, fire suppression. Courses may also be approved from other engineering departments or technical areas to support students' interests or career goals in fire protection engineering. The four courses in the **Graduate Certificate in Engineering** allow students to focus on a concentrated area of study. Both programs prepare engineers to meeting today's fire protection needs in government, the nonprofit sector, and private industry.

## 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: Differential Equations
  - Engineering: Fluid Mechanics and Heat Transfer
- 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/fire-protection](http://mage.umd.edu/fire-protection) 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/fire-protection](http://mage.umd.edu/fire-protection)