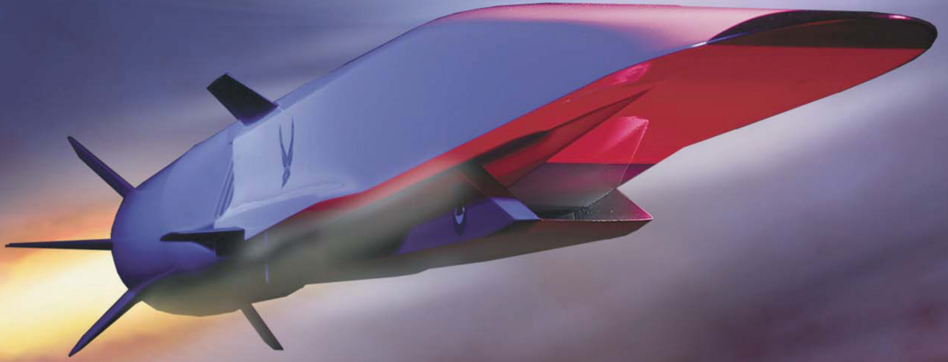




A. JAMES CLARK
SCHOOL OF ENGINEERING



GRADUATE ENGINEERING CERTIFICATE IN

HYPERSONICS

Accelerate your knowledge
of hypersonics applications
for your spot in this highly
specialized market.

HYPERSONICS AT MARYLAND

Advances in the field of hypersonics—travel in the atmosphere at speeds exceeding Mach 5 (five times the speed of sound)—are accelerating rapidly with the potential to transform the aerospace and defense industries. The University of Maryland and the A. James Clark School of Engineering's Department of Aerospace Engineering have a rich history of collaborating with industry, agencies, and academia to bring novel solutions to pressing challenges, such as hypersonic technology. With close proximity to several federally funded institutions and labs that have a critical interest in hypersonic technology—the Naval Air and Surface Warfare Centers, the Applied Physics Laboratory, the Naval Research Laboratory, Aberdeen Proving Ground, and AEDC Hypervelocity Tunnel 9—the university is perfectly positioned to offer the only graduate certificate in engineering in hypersonics in the area. As organizations struggle to hire trained hypersonics engineers, this program directly addresses the current shortfalls of those engineers in today's highly competitive market.

GRADUATE CERTIFICATE IN ENGINEERING IN HYPERSONICS

Offered in partnership with the Department of Aerospace Engineering, one of the nation's leading aerospace programs, this **Graduate Certificate in Engineering** provides students with a deep understanding of the key principles relevant to the flight of high-speed vehicles and projectiles in the atmosphere. Students are introduced to crucial concepts in areas such as hypersonic aerodynamics, high-speed airbreathing propulsion, high-temperature structures and materials, and high-speed guidance, navigation and control. More specialized courses will be offered in important areas such as high-temperature gas dynamics, transition, turbulence, experimental and computational methods, and vehicle design. Students will be introduced to the general concepts of hypersonic flight and gain more specialized knowledge in key areas within the broader hypersonics discipline. This certificate prepares students for careers in hypersonics-related fields in both the commercial and government sectors.

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 course-work to your interests.
- Learn from faculty and 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.

ADMISSION REQUIREMENTS

- A bachelor's degree in aerospace engineering or a related field from an accredited institution
- GPA of 3.0 or better
- Successful completion of calculus I, II, and III, differential equations, and thermodynamics
- 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

GRADUATE CERTIFICATE IN ENGINEERING

- 4 courses (12 credits)

FOR MORE INFORMATION

Visit mage.umd.edu/hypersonics



or scan here for more specific requirements, available courses, and degree planning sheets.

APPLICATION DEADLINES

ONLINE DOMESTIC AND INTERNATIONAL

FALL July 31

SPRING December 15

SUMMER May 15

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.

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/hypersonics

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.

D O N ' T W A I T T O F U R T H E R Y O U R C A R E E R



**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