



A. JAMES CLARK
SCHOOL OF ENGINEERING



GRADUATE ENGINEERING DEGREES IN

ENERGY
SYSTEMS
ENGINEERING

Acquire in-demand expertise
in developing sustainable
energy-efficient systems
and solutions.

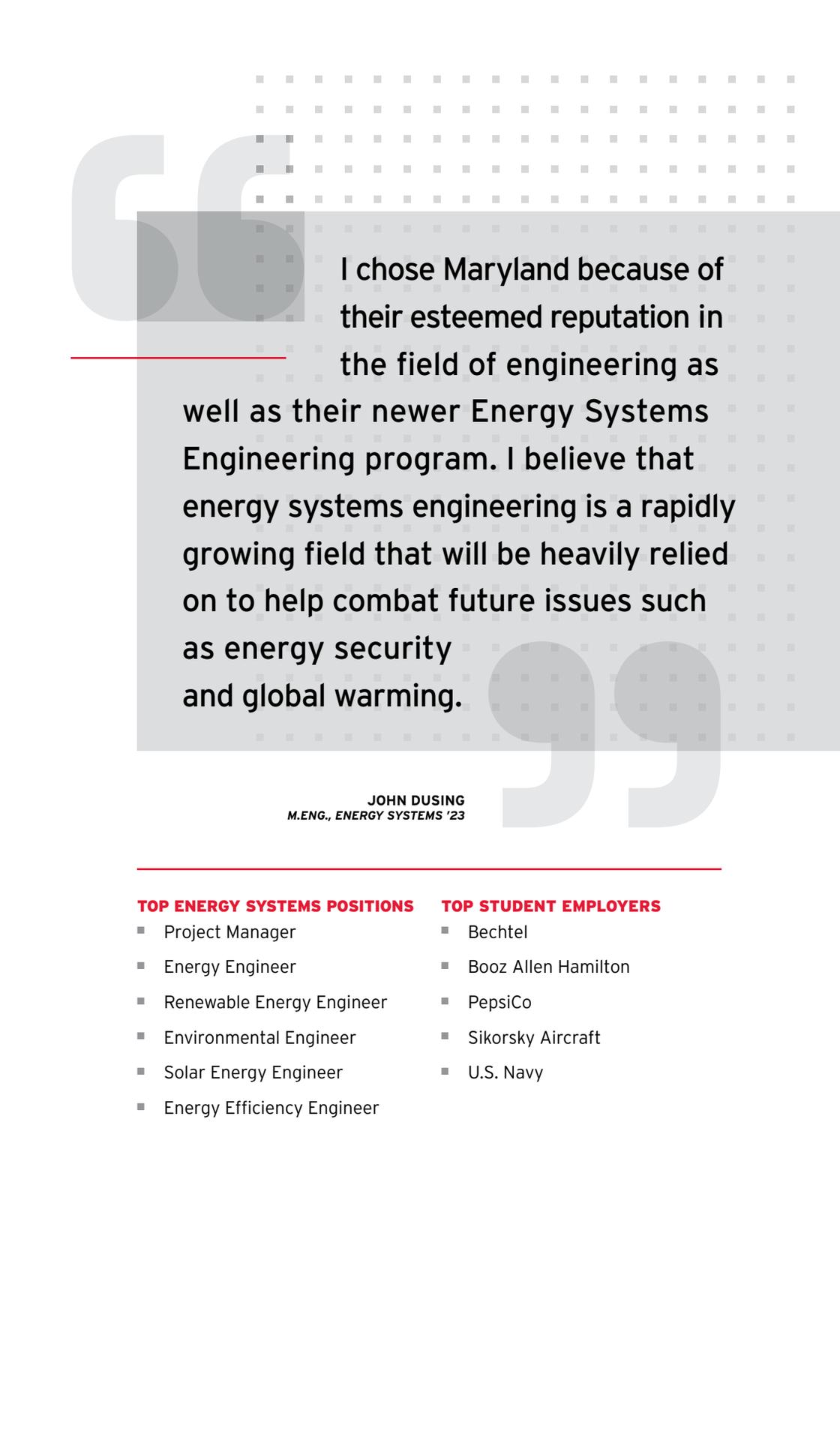
DON'T WAIT TO FURTHER YOUR CAREER

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.





I chose Maryland because of their esteemed reputation in the field of engineering as well as their newer Energy Systems Engineering program. I believe that energy systems engineering is a rapidly growing field that will be heavily relied on to help combat future issues such as energy security and global warming.

JOHN DUSING
M.ENG., ENERGY SYSTEMS '23

TOP ENERGY SYSTEMS POSITIONS

- Project Manager
- Energy Engineer
- Renewable Energy Engineer
- Environmental Engineer
- Solar Energy Engineer
- Energy Efficiency Engineer

TOP STUDENT EMPLOYERS

- Bechtel
- Booz Allen Hamilton
- PepsiCo
- Sikorsky Aircraft
- U.S. Navy

ENERGY SYSTEMS AT MARYLAND

Energy systems engineering—the application of engineering to the science, management, and sustainable use of energy—is a rapidly growing field. The U.S. Bureau of Labor Statistics projects the employment of energy engineers will grow 7 percent from 2020 to 2030, faster than the average for all occupations. This growth is driven by the increasing demand for renewable energy, energy-efficient systems, and solutions to reduce greenhouse gas emissions. With more innovative and less expensive ways to capture and retain wind and solar energy, renewables are becoming an increasingly important power source. The University of Maryland is home to a number of energy centers dedicated to working across disciplinary boundaries and transforming science research, including the Center for Environmental Energy Engineering and the Maryland Energy Innovation Institute (MEII). Based on the College Park campus, the MEII is a platform to catalyze basic research while stimulating economic growth and improving millions of lives across the state of Maryland. Since its inception in 2017, the MEII has awarded \$2.6 million in Energy Seed Grants and has helped launch 20 companies in the state of Maryland.

GRADUATE PROGRAMS IN ENERGY SYSTEMS

Our interdisciplinary **Master of Engineering** and **Graduate Certificate in Engineering** programs draw on the innovation and expertise of the University of Maryland Energy Research Center, which focuses on teaching and research activities on alternative energy generation and storage. The center's work helps develop energy efficient and sustainable technologies and practices that have a positive environmental impact. Energy engineers have important roles to play in maintaining sustainable energy systems while preserving the environment. Students can build on core coursework to broaden their knowledge base with classes in reliability engineering and energy systems or by mixing and matching technical electives. Courses cover a full range of energy options including solar thermal energy, wind energy, heat transfer, and ocean energy harvesting, and are taught by faculty with years of practical experience across a broad spectrum of technology and policy.

**TAKE THE
NEXT STEP**

ADMISSION REQUIREMENTS

- A bachelor's degree in engineering 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
 - Engineering: Thermodynamics, Fluid Mechanics, and Heat Transfer
- 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)

FOR MORE INFORMATION

Visit mage.umd.edu/energy-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

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/energy-systems-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.

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