

ENGINEERING

CAREER PATHS

Engineering programs often focus on theory and conceptual design and typically require higher-level mathematics, including multiple semesters of calculus and calculus-based theoretical science courses. Graduates from engineering programs are called engineers. They often pursue entry-level work involving conceptual design or research and development. Many continue onto graduate-level work in engineering.

Four UMES entrepreneurs were among 8 winners in the fall 2015 edition of a start-up business funding competition sponsored twice annually by Salisbury University



STUDENTS TESTIMONIES

"The UMES engineering faculty members are not only experts in their field but they are experts in teaching effectively, very friendly, and help students on a one-on-one basis. **Abbas Diab** (2015 Graduate)

"Every engineering class, professor, and classmate has contributed to my rich education in the field of Engineering". **Omari Carter** (Sophomore)

"UMES Engineering Program emphasizes teamwork assignments and projects as well as speaking and presentations skills that are highly valued in the real world". **Esther Olowafunmilayo** (Junior)



The 2016 Black Engineer of the Year Conference (BEYA) in Philadelphia proved to be rewarding experiences for these UMES engineering students.

These six students received internships or full-time positions with major corporations in Aerospace Engineering and Mechanical Engineering.

CONSIDER ...

UMES ENGINEERING PROGRAM

Dear Prospective Students

The **UMES Department of Engineering and Aviation Sciences** is looking forward to having you enroll in one of our great **STEM Career Programs**. Our world class Engineering Program is accredited by the Accreditation Board for Engineering & Technology (ABET). Our engineering program consists of 4 specializations:

- ◆ Electrical Engineering
- ◆ Mechanical Engineering
- ◆ Computer Engineering
- ◆ Aerospace Engineering

We are student centered and are committed to providing a world class education and research in engineering and aviation through focused activities with the help of excellent faculty, staff, and facilities. Students in our department enjoy benefits of small classes, direct individual attention, easy access to the professors, dedicated computer and technology resources, and newly equipped laboratories.

We recognize the continuum of learning between our programs and Career and Technology Education High School Completer programs in Maryland. We welcome transfer students from Community Colleges. Military veterans are encouraged to consider our engineering degree program as a natural extension of their military experience into civilian careers requiring a Bachelor's Degree.

Contact us for a visit and opportunity to discuss how our programs can meet your career preparation needs.

UNIVERSITY OF MARYLAND EASTERN SHORE

Yuanwei Jin, Ph.D.

Chair & Professor

Telephone: (410) 651-6365

yjin@umes.edu



DEPARTMENT OF ENGINEERING AND AVIATION SCIENCES

UNIVERSITY OF MARYLAND EASTERN SHORE

Engineering & Aviation Sciences Complex
30925 College Backbone Road
Princess Anne, Maryland 21853-1299

Telephone (410) 651-6365

Fax: (410) 651-6486



ENGINEERING AND AVIATION SCIENCES

ENGINEERING DEPARTMENT GRADUATES GET JOBS!!!

ABOUT ENGINEERING

The Engineering curriculum consists of 124 total credit hours including 64 credits of engineering courses and 60 credits of General Education and Support Courses. Students choose 17 credit hours of specialization from one of the four different areas in Engineering and 47 credit hours of core engineering courses. The specialization areas are

- ◆ Aerospace Engineering
- ◆ Computer Engineering
- ◆ Electrical Engineering
- ◆ Mechanical Engineering



The curricula includes 28 credit hours of general education courses in English, Arts and Humanities, Social and Behavioral Sciences, and Emerging Issues.

The General Education Courses include 40 credit hours of courses in English, Arts and Humanities, Chemistry and Physics, Social and Behavioral Sciences, Emerging Issues. An additional 20 credits in the Supportive Sciences & Math are

required as a part of the engineering curriculum, which includes advanced level of calculus, physics, and differential equations. Our accredited engineering curriculum enables our graduates to become competitive.

ENGINEERING & AVIATION SCIENCES COMPLEX

State of the Art Classrooms and Labs



Call or email us and we will help you get started on a great career education at UMES!

WHAT DO ELECTRICAL ENGINEERS DO?

Electrical Engineers design and develop new electrical equipment, solve problems and test equipment. They work with all kinds of electronic devices, from the smallest pocket devices to the international space station.

WHAT DO MECHANICAL ENGINEERS DO?

Mechanical Engineers are typically involved with the generation, distribution, and use of energy; the processing of materials; the control and automation of manufacturing. Mechanical Engineers are characterized by personal creativity, breadth of knowledge, and versatility.

WHAT DO COMPUTER ENGINEERS DO?

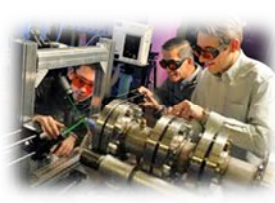
Computer Engineers make computers faster, smaller, cheaper, and smarter. They design and implement hardware for the next generation computing systems; design and analyze computer architectures; design and implement software for applications; design and analyze computer communication systems.

WHAT DO AEROSPACE ENGINEERS DO?

Aerospace Engineers oversee the research and development of different types of aircraft including unmanned systems. He or she works with advanced computer software to design new crafts, create detailed schematics, and conduct experiment and testing.



ELECTRICAL ENGINEERING



MECHANICAL ENGINEERING



COMPUTER ENGINEERING



AEROSPACE ENGINEERING



Julius Ejenavi

Engineering Program Coordinator

Department of Engineering & Aviation Sciences

EASC Building, Suite 2032

30925 College Backbone Road

Princess Anne, Maryland 21853-1299

Telephone: (410) 651-8095

Fax: (410) 651-6486

Email: joejenavi@umes.edu