



AEROSPACE ENGINEERING

Aerospace engineers design and build aircraft, spacecraft, satellites, missiles and aerospace systems. Employed by industry, academia and government labs, aerospace engineers enable future space exploration, advanced propulsion, aerial mobility and so much more!

PURSuing AEROSPACE ENGINEERING AT UK

The University of Kentucky is proud to offer the only undergraduate degree in aerospace engineering in the Commonwealth. The aerospace engineering program is housed in the Department of Mechanical and Aerospace Engineering and is led by numerous faculty members with highly reputable research and expertise in a broad range of aerospace applications including controls, propulsion and hypersonics.

CAREER PROSPECTS IN AEROSPACE ENGINEERING

Aerospace is one of the healthiest industrial segments of the U.S. economy, accounting for half of the world's global aerospace production. Employment of aerospace engineers is projected to grow 6% from 2018 to 2028, according to the U.S. Bureau of Labor Statistics. Within the state, Kentucky is home to 79 aerospace-related facilities that employ over 19,000 people, including General Electric, Lockheed Martin, Belcan Corp., Raytheon, General Dynamics Group, and Sikorsky Aircraft Corp.

UNDERGRADUATE RESEARCH IN AEROSPACE ENGINEERING

UK provides ample opportunities for undergraduate students to participate in research with our award-winning faculty. Undergraduate students can participate in research as part of an elective course or as a research assistant in the college's many world-class laboratories. Projects funded by NASA Kentucky provide opportunities for space systems research. We welcome you to explore the faculty research profiles on our website to discover the wide range of opportunities.

CO-OPS

UK provides opportunities to co-op with many companies. Students can co-op during the fall, spring, or summer terms. Those who complete three co-op rotations will receive formal recognition upon graduation with a special cord (beginning with May '23 graduates). Students work with the co-op director and their academic advisor to determine the best timing for their co-op experiences.

PROGRAM FACTS

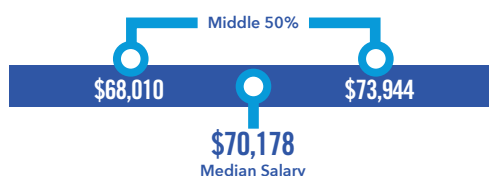
Common Minors: Mathematics, Computer Science and Physics

Student Organizations:

American Institute of Aeronautics and Astronautics, and SpaceLex Rocketry Team

GRADUATE STARTING SALARIES

Median full-time starting salary info for 2021 new college graduates
National Association of Colleges and Employers - Summer 2022



INDUSTRY SECTORS:

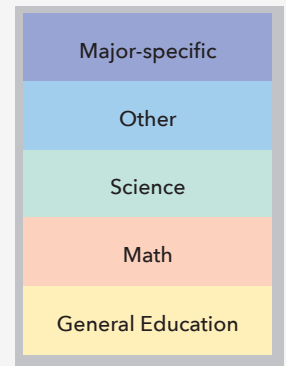
- Aerodynamicist
- Aircraft/Spacecraft Systems Engineer
- Propulsion Engineer
- Data Analyst
- Operation Integrations Manager

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Curriculum Synopsis

This list is a synopsis of classes a student will take to pursue a degree in aerospace engineering. As part of the aerospace engineering curriculum, students must complete the pre-engineering requirements, major requirements and general education coursework, called UK Core.

Note: This synopsis represents one of several paths to an aerospace engineering degree. Consult the departmental website for details on specific paths.



YEAR ONE	YEAR TWO	YEAR THREE	YEAR FOUR
Engineering Exploration I and II	Dynamics	Aerodynamics	Aerospace Engineering Lab
Fundamentals of Engineering Computing	Engineering Thermodynamics I	Aerospace Structures	Aircraft Performance
Chemistry I	Introduction to Aerospace Engineering	Elements of Heat Transfer	Capstone Design I and II
Physics I and Lab	Introduction to Materials and Manufacturing Processes	Engineering Analysis	Design of Control Systems
Calculus I and II	Mechanics of Deformable Solids	Engineering Experimentation I	Three Technical Electives
Composition and Communication I and II	Statics	Flight Dynamics	UK Core Courses
UK Core Course	Physics II and Lab	Fluid Mechanics	
	Calculus III and IV	Propulsion	
	Engineering Statistics	Electrical Circuits and Electronics	
	UK Core Course	Technical Writing	

TAKING CO-OPS?
When you participate in semester co-ops, the above schedule can adjust.

Detailed Curriculum Information: enr.uky.edu/explore/aerospace-engineering

As a new academic offering, the aerospace program will be eligible to apply for accreditation following the first graduates of the program. Once accreditation is received, it will apply to any student who has gone through the program within two years of the accreditation being awarded.

Revised August 2022. Information subject to change. For the most up-to-date information on the UK College of Engineering, visit www.enr.uky.edu.