Bachelor of Science

Aeronautical and Astronautical Engineering

College of Engineering

Aeronautical and astronautical engineering (AAE) focuses upon the challenges of flight. The proper aerodynamic shape, the correct engine for clean propulsion, the best materials for lightweight structures, and the safest control systems must be integrated to produce an efficient and economical flying machine. Our faculty brings their expertise in the varied disciplines of aerospace engineering to the classroom and laboratory and use extensive research activities to enhance their lectures. A fascination with flight and an interest in airplanes or spacecraft is often the primary motivation for starting a career in aeronautical and astronautical engineering. By the time a student graduates, they had developed a technical interest in aerodynamics, structures, dynamics, propulsion, controls, design, or systems. Those going on to obtain graduate degrees do so because they are interested in specific technical areas in which they wanted to develop more expertise.ⁱ

Career Areas/Job Titles:

Management and Industry

Entrepreneur Structural Design Expert Manager Manufacturing Expert Consultant Materials Specialist Propulsion Expert Sales Person Operations Specialist Guidance and Control Systems **Communication and Media** Technical Writer Grant Writer Marketing Specialist **Science and Technology** Research and Design Specialist Aerospace Engineer Design Engineer Education K-12 Teacher Professor Government/Politics Lobbyist Lawyer

*Some careers may require licensure, certification, or further education. Talk to an advisor about specific requirements.

Transferable Skills:

- Basic Computer Skills Engineering Fundamentals Mathematic Skills Physics Foundation Persuasion Provide/Respond to Feedback Use Technology Effectively Written Communication Teamwork
- Willingness to Take Risks Conceptualization Defining Needs Forecasting/Predicting Identifying Problems Setting Goals Adaptability/Flexibility Attention to Detail Judgment & Decision Making
- Initiative Delegating Tasks Organization Skills Planning Prioritizing Tasks Strategic Planning/Visioning Creating Innovative Solutions Quantitative Reasoning Analytical/Critical Thinking

*This is not an extensive list of transferable skills. See larger list of skills you might develop here: <u>http://ccss.osu.edu</u>

Professional Links:

American Institute of Aeronautics and Astronautics: <u>https://www.aiaa.org</u> Aerial Robotics Team at Ohio State: <u>http://engineering.osu.edu/studentorgs/buckeye-aerial-robotics-team</u> AAE at Ohio State: <u>http://mae.osu.edu/undergraduate/aeronautical-and-astronautical-engineering-program</u>