

Unmanned Aerial Systems (UAS)

Certificate of Achievement

Program **AVI.UAS.CRT**
CIP 490199



The Unmanned Aerial Systems (UAS) certificate program, a beginning step in becoming a professional UAS operator, explores the practical use of drones and trains individuals for work as professional UAS pilots in the exciting industry of aerial robotics or drones.

The potentials for commercial usage of unmanned systems are tremendous, including remote sensing of atmosphere, disaster response, weather forecasting, scientific research, agricultural surveying, wildlife surveying, payload transportation, search and rescue, and aerial photography.

This certificate program addresses the latest commercial drone regulations implemented by the Federal Aviation Administration (FAA). Classroom training prepares students to pass the required written test and be eligible to obtain their remote operator certificate for UAS vehicles. In addition, exceeding FAA requirements, students must pass a practical test – flying a drone – while an instructor observes.

PROGRAM OUTCOMES

- Achieve awareness of current and potential capabilities and trends of UAS vehicles;
- Interpret and apply federal regulations specific to UAS operations and general aviation;
- Demonstrate knowledge of the political, legal, and moral issues of UAS as well as evolving FAA rules and regulations;
- Identify UAS platforms, to include unmanned aerial vehicles (UAVs), ground control stations, and ground support equipment;
- Demonstrate proficiency in flight planning and executing the flight of a UAS vehicle;
- Transfer to a bachelor's degree program if desired.

Admission to the program requires a high school diploma or its equivalent with one year of algebra.

Curriculum

Code	Course (lecture/lab hours)	Credits
MAT 135	Intermediate Algebra with Applications (4/0) ¹	4
AVI 113	Flight I (1/3)	2
AVI 131	Commercial Pilot I (3/0)	3
UAS 101	Introduction to Unmanned Aerial Systems (UAS) (3/1)	3
UAS 102	Advanced Unmanned Aerial Systems (UAS) (3/1)	3
AVI 215	Aerodynamics (2/2)	3
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¹ Not required for students possessing an associate or bachelor's degree.