

UNCREWED AERIAL SYSTEMS (UAS)

UAS 107 - Remote Pilot Ground

Credit Hours: 3, Contact Hours: 3

Division: Aviation

This course is structured to provide the student with the knowledge to pass the FAA Remote Pilot written test. This certification is required to be a Commercial Drone Operator. Topics include: airport operations, aircraft performance, regulations, meteorology, airspace, maintenance, UAS operations, risk assessment/management. As part of this course, students will earn Part 107 Remote Pilot Certification. This course will be completed upon the student passing the FAA Remote Pilot written exam. FAA testing fee is not included in the course fee. Group 2 course.

UAS 121 - UAS Applications in Surveying

Credit Hours: 3, Contact Hours: 4

Division: Aviation

The objective of this class is to give the student the background necessary to operate drones for surveying applications. This course will cover the following topics: obtaining a FAA Commercial Drone License, operation of a drone system to include data collection for mapping, software training for creation of point clouds, mosaics, topographical maps, and more. Passing the FAA Remote Pilot written examination is a requirement of the class. FAA testing fee is not included in the course fee. Group 2 course.

UAS 131 - UAS in Law Enforcement

Credit Hours: 1, Contact Hours: 2

Division: Aviation

This course is designed to give the student the background necessary to operate drones for law enforcement applications. Students will be prepared to take the FAA Remote Pilot written test. This certification is required to operate drones for law enforcement purposes. Students will also receive hands-on training to develop flight skills and learn more about using drones for law enforcement purposes. Passing the FAA Remote Pilot written examination is a requirement of the class. Group 2 course.

UAS 141 - Remote Pilot Flight

Credit Hours: 3, Contact Hours: 4

Division: Aviation

Students will be introduced to the world of Unmanned Aerial Systems. This course takes a look at everything from current Unmanned Aircraft Systems to future civilian applications. In addition to learning about this new industry, students will be introduced to flying remotely piloted aircraft and operating entry level Unmanned Aerial Vehicles. Group 2 course.

UAS 211 - Commercial Drone Operations

Credit Hours: 3, Contact Hours: 4

Division: Aviation

This course will guide students deeper into the Unmanned Aerial Systems industry. Topics such as aerial mapping, land survey, agricultural applications and industrial inspections will be covered in this lecture/lab based class. In addition, the student will be introduced to operating professional Unmanned Aerial Systems. Group 2 course.

Required Prerequisite(s): UAS 107 or AVG 142, and UAS 141 or AVF 141.

UAS 215 - Commercial UAS Photography

Credit Hours: 3, Contact Hours: 4

Division: Aviation

This course provides hands-on experience with UAS systems for photography and videography, guiding students through photo and video projects that apply principles of image acquisition, processing, and production. Through lectures, flight training, and homework, students learn about sUAS features, visual storytelling, processing software, file workflows, project planning, risk assessment, and final production. Group 2 course.

Required Prerequisite(s): UAS 107 and UAS 141

UAS 220 - UAS Projects and Maintenance

Credit Hours: 3, Contact Hours: 4

Division: Aviation

This hands-on course will give the student an opportunity to build and test fly both multirotor and fixed wing aircraft. The course focuses on building and maintenance techniques, autopilot integration, flight tuning, power sources, servos and communication links. Group 2 course.

Required Prerequisite(s): UAS 107 or AVG 142, and UAS 141 or AVF 141.

UAS 241 - Advanced Drone Operations

Credit Hours: 3, Contact Hours: 4

Division: Aviation

This lecture and lab based course will introduce the student to advanced autopilot programming and more complex UAS operations such as gas powered fixed wing aircraft. Students will also be applying crew resource management and risk assessment techniques to their operations. Group 2 course.

Required Prerequisite(s): UAS 211 or AVF 211

UAS 255 - UAS Safety Management

Credit Hours: 2, Contact Hours: 2

Division: Aviation

This online course will introduce remote pilots to the four pillars of a safety management system to include safety policy, safety risk management, safety assurance and safety promotion. Additionally, this course will explore, through exercises and readings, the process for incorporating these principles into a small UAS flight service company. Group 2 course.

Required Prerequisite(s): UAS 241 or AVF 241

UAS 260 - Aerosonde UAS Ground Training

Credit Hours: 4, Contact Hours: 5

Division: Aviation

This ground school and simulator course will provide the foundation training on the Textron Aerosonde UAS platform, one of the leading UAS platforms in the U.S. Students will learn the systems and operational procedures along with in-depth simulator training that will prepare them for the Aerosonde UAS Flight course. Group 2 course.

Required Prerequisite(s): UAS 255

UAS 261 - Aerosonde UAS Flight Training

Credit Hours: 3, Contact Hours: 4

Division: Aviation

This hands-on flight course allows students to earn a manufacturer's certification from one of the leading UAS platforms manufacturers in the U.S. Students will participate in live flight training utilizing the Aerosonde Small UAS platform, a leading platform currently operated for U.S. Department of Defense customers around the globe. Group 2 course.

Required Prerequisite(s): UAS 260 or AVG 260

UAS 290 - Uncrewed Aerial Systems Internship

Credit Hours: 2-4, Contact Hours: 2-4

Division: Aviation

The purpose of the internship is to provide on-the-job training for the student who wishes to pursue a career in a technical field of study. The internship will be customized to meet the learning needs of the student and the job requirements of the sponsoring firm. Students spend 10-15 hours per week in this paid, supervised on-the-job training experience. In addition to the required 50 hours per credit in a work site, students participate in semi-monthly seminars. Students must apply one month prior to the semester in which they will complete the internship. Group 2 course.

Required Prerequisite(s): 30 credits of program specific courses with a GPA of 2.0 or higher.