

CERTIFICATE OF COMPETENCY IN DRONE OPERATIONS

This curriculum is designed to provide an opportunity for noncredit students taking courses in drone technology to achieve a certificate in drone operations. The curriculum includes courses in public safety, autonomous and environmental science applications in drones. This program is designed to prepare the student with a fundamental understanding of professional, industrial and scientific applications of UAS drones as well as prepare students to operate a variety of drones. Students will acquire knowledge of issues relating to environmental, public safety and autonomous drone delivery. Students will develop skills in drone piloting, mapping software, field collection methods, realistic working conditions and methods specific to jobs that utilize drones to solve environmental, humanitarian issues, work in public safety field operations and coordinate autonomous delivery flights. Completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for further academic study through advanced course work. This curriculum specifically prepares the student for work with organizations, companies and industries as well as advanced coursework in UAV/UAS technology, STEM, administration of justice, environmental science, engineering, remote sensing and mapping.

Code	Title	Units
Required courses:		
NC 110	Drone Applications in Public Safety	0
NC 111	Autonomous Applications in Drones	0
NC 112	Environmental Science Applications in Drones	0
Total Units		0

Certificate of Competency Level Student Learning Outcomes

Students completing the Drone Operations Certificate of Competency will:

1. Acquire technical knowledge of the applications of drones for public safety, search and rescue, firefighting and law enforcement operations. Acquire hands-on skills in the use of thermal cameras, thermal image processing, obstacle course training in search and rescue drone operation, current UAS regulations, aerial photography, and media editing skills in preparation to work in the public safety industries.
2. Acquire technical knowledge of drone operations for autonomous operations, BVLOS regulations, drone delivery methods and mission planning. Various autonomous drone systems would be utilized to gain hands-on skills in autonomous mission planning and flight.
3. Develop an understanding of major global issues involving the environment and how drones can and have been used to address and potentially solve these issues. Acquire hands-on experience in drone flight using obstacle courses and scenario-based training to improve flight skills. Instruction of basic drone flight maneuvers, field data collection and performance in guided field training.

Career Information

Career Opportunities

There are a variety of careers you can do with this major.

To explore more about this major, schedule an appointment (<https://www.citruscollege.edu/stdntsrvc/ctcenter/Pages/ApptSchedule.aspx>) with a career counselor.