UAS 241 - ADVANCED DRONE OPERATIONS

Course Description

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.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

UAS 211 or AVF 211

Course Learning Outcomes

Knowledge:

- Identify advanced drone operations including advanced autopilot programming and gas powered fixed-wing aircraft.

Application:

- Demonstrate remote pilot operational competencies during ground and flight evolutions in accordance with Airmen Certification Standards (ACS).
- Perform complex UAS operations in a controlled environment.

Integration:

- Combine problem solving skills and risk mitigation to fly in accordance with ACS requirements.
- Connect personal minimums and maintaining fitness to fly in accordance with ACS requirements.

Human Dimension:

- Be aware of their personal fitness to fly in accordance with ACS requirements.
- Acquire sound decision making and judgement during complex flight operations.
- Communicate with small groups to identify crew resource management.

Caring - Civic Learning:

- Demonstrate how decision making and personal actions impact aircraft, sensors and people on the ground.
- Recognize the need for ensuring aviation safety and public perception of the unmanned aircraft industry.

Learning How to Learn:

- Integrate prior learning and flight experiences to provided scenarios.
- Self-assess positive study habits for recurrent training requirements of the FAA.