

OVERVIEW

In this three-day custom course, students will learn how to deploy drones in a multi-faceted approach, combining knowledge of drone technology, patrol applications, and operational standards related to search and rescue.

Students will learn about the features and capabilities of their drones for tactical operations. The instructors will dive deeply into the drone's flight modes, camera settings, obstacle avoidance, and tracking capabilities. The students will enhance there knowledge in thermal cameras, optical zoom cameras, subject detections, and UAS Night Operation.

Students will be put through various short-duration flights after learning about standard operating procedures and strategies for compliance. Students will be able to define step-by-step procedures for drone deployment, flight planning, data collection, and analysis. Considering factors such as airspace regulations, flight safety, privacy concerns, and general communication protocols. Students will learn how to provide continuous internal training among their unit to increase their operational effectiveness.

COURSE DETAILS



RATE

Covered by grant



LOCATION

Hamilton Co. Trg Center 7925 E 160th St, Noblesville, IN 46062



DATE & TIME

August 27-29, 2024

REGISTRATION

TOPICS COVERED

- Establishing Standard Operating Procedures (SOPs)
- **Ensuring Regulatory Compliance:** Adhering to all applicable laws, acquiring necessary permits or certifications, and adhering to safety protocols are imperative.
- Drone Nomenclature, Settings, Technology, and Future Advancements:
- **Search and Rescue Operations:** Deploying drones to execute search patterns and employ deconfliction tactics across varied terrains. Utilizing the drones' camera systems and sensors to capture real-time video and data, while monitoring subject behaviors and locations through heat signature detection.
- **Fundamentals of Thermal Imaging:** Providing an overview of thermal components and functionalities, with hands-on experience in operating thermal cameras.
- **Techniques for Effective Thermal Imaging:** Understanding thermal signatures and their interpretation, utilizing thermal imaging for anomaly detection and analysis, and integrating thermal data with other sensor outputs to enhance situational awareness.
- **Tactical Operations:** Challenging students with flying drones indoors or within enclosed structures, where limited visibility, tight spaces, radio frequency communication, and obstacles pose significant challenges.
- Maintenance and Training:

STUDENT REQUIREMENTS

- Primary UAS Thermal
- Indoor UAS
- Multiple Batteries
- Charging Systems
- Part 107 recommended
- UAS flight experience necessary
- Note taking material
- Dress for the weather



