Drone and Unmanned Aerial Systems (UAS) Threat Mitigation Training Course

Professional Development Training Course Outline

Category	Defense and Security	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The rapid expansion of drone technology and unmanned aerial systems has introduced both unprecedented opportunities and significant security challenges across government agencies, defense units, critical infrastructure, private security sectors, and law enforcement. As hostile drones become increasingly affordable, agile, and capable of surveillance, smuggling, disruption, and targeted attacks, organizations must adopt advanced UAS threat detection, risk assessment, counter-drone operations, and airspace protection strategies. Drone and Unmanned Aerial Systems (UAS) Threat Mitigation Training Course provides a comprehensive framework for identifying drone threats, analyzing vulnerabilities, implementing mitigation systems, and deploying counter-UAS solutions while complying with regulatory and operational safety requirements.

Participants will gain essential skills in emerging drone technologies, airspace monitoring, radio-frequency detection, radar systems, electronic countermeasures, and response protocols for unauthorized or malicious drone activity. Through expert-led sessions, real-world examples, and case-based learning, the course equips security personnel, intelligence teams, and operational commanders with the tools to detect, analyze, deter, and neutralize drone threats responsibly. By the end of the program, participants will be prepared to support mission-critical environments through proactive threat mitigation and coordinated drone response frameworks.

Programme Curriculum

Drone and Unmanned Aerial Systems (UAS) Threat Mitigation Training Course

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Course Objectives

1. Understand core concepts of drone technology, UAS capabilities, and threat classifications.
2. Analyze emerging trends in hostile drone activity and evolving security risks.
3. Apply advanced UAS threat detection tools including RF sensors, radar, and optical systems.
4. Conduct drone risk assessments for high-security and critical infrastructure sites.
5. Implement counter-UAS operational procedures aligned with regulatory frameworks.
6. Evaluate electronic and physical mitigation technologies for active drone threats.
7. Develop rapid response protocols for unauthorized or malicious drone incursions.
8. Strengthen situational awareness using real-time drone monitoring technologies.
9. Establish organizational drone defense policies and command structures.
10. Conduct incident reporting and post-event analysis for drone-related security breaches.
11. Integrate intelligence gathering and predictive threat modeling into UAS security planning.
12. Coordinate inter-agency collaboration for airspace protection and emergency response.
13. Build capacity for safe, ethical, and lawful drone threat mitigation practices.

Organizational Benefits

- Improved airspace security and real-time threat detection
- Reduced vulnerability to drone-based espionage and surveillance
- Stronger protection of critical infrastructure and high-value assets
- Enhanced ability to respond to unauthorized drone intrusions
- Compliance with national aviation and security regulations
- Increased operational efficiency of security teams
- Better coordination between security, intelligence, and enforcement units
- Reduced operational downtime due to drone disruptions
- Improved staff readiness through specialized training
- Strengthened institutional resilience to evolving drone threats

Target Audiences

- Security and intelligence officers
- Law enforcement agencies
- Critical infrastructure protection teams
- Border control and customs officers
- Airport and aviation security personnel

- Military and defense operations staff
- Emergency and disaster response units
- Private security and risk management professionals

Course Duration: 5 days

Course Modules

Module 1: Fundamentals of Drone and UAS Systems

- Overview of drone types, classifications, and capabilities
- Key components of UAS platforms and their functions
- Drone flight behavior and operational environments
- Common uses of drones in legitimate and harmful activities
- Implications of drone technology for security operations
- Case Study: Unauthorized drone flying near a major event venue

Module 2: Drone Threat Landscape and Risk Assessment

- Identifying malicious drone activities and behavioral patterns
- Assessing vulnerabilities in critical infrastructure and public spaces
- Understanding drone swarm threats and autonomous operations
- Conducting site-specific drone threat risk assessments
- Prioritizing mitigation strategies based on risk profiles
- Case Study: Drone interference at a national energy facility

Module 3: Detection Technologies and Airspace Monitoring

- Radar systems for detecting small UAS in complex environments
- Radio-frequency detection and signal interception tools
- Electro-optical and infrared detection methods
- Integration of multi-sensor analytics for improved accuracy
- Deploying real-time monitoring for restricted airspace
- Case Study: Detection failure during an unauthorized drone intrusion

Module 4: Counter-UAS Mitigation Techniques

- Electronic jamming and RF disruption tools
- Safe drone interception and capture strategies
- Physical countermeasures including nets and mobile interceptors
- Evaluating effectiveness of kinetic versus non-kinetic methods
- Understanding legal constraints on counter-drone actions
- Case Study: Successful drone capture during a security operation

Module 5: Response Planning and Operational Protocols

- Establishing standard procedures for drone threat response
- Coordinating ground teams and command centers
- Communication protocols during active drone incidents
- Incident classification and escalation pathways
- Maintaining safety during counter-UAS operations
- Case Study: Coordinated response to a drone incident at a public event

Module 6: Legal, Regulatory, and Ethical Considerations

- National and international regulations governing drone use
- Airspace laws, privacy considerations, and operational limits
- Legal constraints in deploying counter-UAS technologies
- Ethical management of drone disruptions and data handling
- Aligning mitigation actions with regulatory boundaries
- Case Study: Legal repercussions of improper counter-UAS deployment

Module 7: Intelligence, Data Analysis, and Predictive Threat Modelling

- Leveraging intelligence sources for drone threat anticipation
- Identifying patterns of drone misuse and potential actors
- Integrating data analytics for predictive threat modeling
- Use of software tools for situational forecasting
- Enhancing decision-making through intelligence fusion
- Case Study: Predictive analysis leading to prevention of drone infiltration

Module 8: Drone Security Strategy, Policies, and Institutional Preparedness

- Developing institutional drone threat mitigation policies
- Establishing command structures and responsibilities
- Staff training and operational readiness programs
- Building organizational resilience to drone disruptions
- Continuous improvement of counter-UAS strategies
- Case Study: Institution-wide success following implementation of a UAS mitigation plan

Training Methodology

- Instructor-led presentations and demonstrations
- Group discussions based on real-world drone incidents
- Case study analysis for practical understanding
- Hands-on exercises using detection and mitigation tools
- Scenario-based simulations for response planning
- Development of action plans tailored to participant organizations

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
02 Nov 2026	06 Nov 2026	Online	$1,000
02 Nov 2026	06 Nov 2026	Physical	$1,500
02 Nov 2026	06 Nov 2026	Physical	$3,000
02 Nov 2026	06 Nov 2026	Physical	$3,000
02 Nov 2026	06 Nov 2026	Physical	$6,000
02 Nov 2026	06 Nov 2026	Physical	$4,500
02 Nov 2026	06 Nov 2026	Physical	$6,000
02 Nov 2026	06 Nov 2026	Physical	$6,000

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