

## OFDA Course Description

Welcome to the **Oxygen Forensic® Drone Analysis** training course!

This one-day instructor-led training event is geared toward students looking to gain insight into the world of Unmanned Aerial Vehicle (UAV) forensics. Using Oxygen Forensic® Detective, attendees will learn best practices for data extraction from UAVs, UAV mobile device applications and associated cloud account data. Students will examine these data collections to build a forensic report detailing all activity of a UAV flight including analysis of associated images and movies on SD-cards as well as flight-control black box data.

Oxygen Forensic® Detective is the flagship technology of Oxygen Forensics and a world-class suite of tools that allow an investigator to ingest mobile device data from all industry standard extraction formats into a database architecture for single device analysis or multi-device analytics. The recent implementation of the x64 architecture of JetEngine elevates Oxygen Forensic® Detective to an unparalleled level of optimization, efficiency, and analysis.

Students will use Oxygen Forensic® Detective to correlate data to include:

- Identifying aircraft details
- Flight log data
- Images and videos
- Geolocation data and plotting
- Controller-based application file structure for relevant data

Additional in-depth training available for Oxygen Forensic® Detective includes:

- OFDA – Oxygen Forensic® Drone Analysis (1-day, instructor-led)
- OFCE – Oxygen Forensic® Cloud Extraction (1-day, instructor-led)
- OFXiB – Oxygen Forensic® Extraction in a Box (3-day, instructor-led)
- OFAA – Oxygen Forensic® Advanced Analysis (3-day, instructor-led)
- OFBC – Oxygen Forensic® Boot Camp (3-day, instructor-led)
- OFDV – Oxygen Forensic® Detective Viewer (1-day, on-demand)
- OFAT – Oxygen Forensic® Agent Triage (1-day, instructor-led)
- OFDP – Oxygen Forensic® Data Presentation (1-day, instructor-led)
- OFKC – Oxygen Forensic® KeyScout Collection (1-day, instructor-led)
- OFAI – Oxygen Forensic® Analytic Investigation (1-day, instructor-led)

All courses can be accessed buffet-style at a fixed price with a Training pass.

# Course Modules

## **Install and Support**

This module educates end-users about their customer experience with Oxygen Forensics while learning to install the latest Oxygen Forensic® Detective (OFD) products and mobile device drivers. Students will learn how to access their unique customer portal and download any software components needed.

## **Introduction to UAV Forensics**

To effectively process drones and their respective data, a crash course in UAV concepts and available data would be in order. This module discusses sUAS characteristics, criminal use-cases for UAVs and manufacturer variables that can help differentiate between UAVs. Students will learn the aircraft power-on process through to how flight logs are created and updated.

## **Components of sUAS**

This module focuses on the components and features of sUAS to include:

- Batteries
- GPS receivers
- Ground vs. air controllers

Additionally, controller options and autonomous flight details are covered:

- Wi-Fi controls
- Signal interception
- Return to home features
- Basic vs. smart vs. integrated controllers

## **Mobile and Tablet Devices**

This module inspects the bespoke | custom flight controller concept to include “First Person View” and integrated displays.

## **Drone collection techniques**

The processes of extracting data from aircraft, mobile and tablet devices as well as controllers and cloud accounts are of prime importance when nurturing the elements of a drone investigation. This module demonstrates data recovery from a DJI Spark.

## **Data Interpretation**

In this module, students use Oxygen Forensic® Detective to review collected data:

- UAV data
- Flight logs
- Cloud data
- Image and video files
- Geolocation-base data
- Ground vs. air controllers
- Local and synchronized logs
- Folder structure of Android and iOS devices

## **Report Writing**

This module summarizes the course by presenting best practice report writing specially aligned to make sense of drone, controller, and cloud-based data. The module includes a glossary of industry standard drone definitions.

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Thank you for the interest in Oxygen Forensic® Detective training.

Hope to see you in class soon!

