

Cellebrite Mobile Forensics Fundamentals

Global Forensic Training



Level

Entry/Beginner

Length

Two-Day (14 hours)

Learning Track

Cellebrite Mobile Forensics

Delivery Mode



Instructor
Led



Web-
based

Course Description

The Cellebrite Mobile Forensics Fundamentals (CMFF) course is a Two-Day (14 hours) Entry/Beginner level program designed for investigators to learn about mobile devices, understand general ideas of the forensic process, learn how to seize devices, and review extracted device data provided by examiners. Participants are introduced to baseline concepts and prerequisite knowledge to understand issues surrounding the handling of mobile devices as evidence. This class does NOT include conducting extractions.

The CMFF is the starting point for first responders, investigators and Crime Scene Investigations staff tasked with identifying and seizing mobile devices for data acquisition. CMFF is ideal for data extraction team members, technically savvy investigators, digital forensic examiners, arresting officers, internal affairs investigators, evidence technicians, and IT staff.

Note: No pre-requisites exist to attend the CMFF class but is the first requirement to qualify for the Cellebrite Certified Mobile Examiner (CCME) certification exam. The CMFF course, is also available as a test-out for those individuals who feel they know the material and focused on achieving the CCME pre-requisites.

CMF Program & Learning Tracks

Cellebrite aims to support learners in the pursuit of excellence in Digital Intelligence specialty areas without the need to commit to any degree program. Cellebrite's Academic & Learning Tracks provide guided training programs and continuous skillset development to achieve various levels of educational or professional goals. By choosing a "track" or "learning path" students can focus on personal, professional, and leadership skills in a Digital Intelligence career for either law enforcement, military, intelligence, and private sector practitioners. .

Below is general information related to the audiences and focus areas for professionals taking this course, as part of the Cellebrite Mobile Forensic (CMF) training program. Cellebrite's CMF curriculum reflects our commitment to digital forensics excellence; training forensics examiners, analysts, investigators and prosecutors around the world to achieve a higher standard of professional competence and success.

The CMFF training is designed for the following professionals:

- Administrators
- Analysts
- CSI Staff
- Digital Forensic Examiners
- Investigators
- Legal Professionals

Course Objectives

Upon successful completion of the course, the student will be able to:

- Review of different mobile devices,
- Description of digital forensic processes,
- Discussion about best practice when seizing devices,
- Exploration of extracted device data,
- Explanation about generating basic reports using Reader, and
- Demonstrate proficiency by completing an exam with a minimum passing score of 80%.

Modules and Topics

Module	Topics
Module 1: Introduction	<ul style="list-style-type: none"> • Discuss course administration. • Describe Cellebrite’s core training and certification process. • Review of the capabilities engineered in the Cellebrite Platforms and digital forensic solutions. • Discuss a practitioner’s legal responsibilities using Cellebrite products, software, and services.
Module 2: Introduction to Mobile Devices	<ul style="list-style-type: none"> • Correctly identify mobile device hardware. • Identify mobile device operating systems. • Discuss mobile device communication technology. • Describe the effects of evolving technology on the mobile digital forensics industry. • Recount a historical overview of the Apples iOS operating system platform. • Discuss the value of Apple iOS devices to investigators. • Examine mobile device and internet of things (IoT) technologies of value in an investigation. • Explain the reasons influencing popularity of iOS devices and platform. • Recount a historical overview of the Android operating system platform. • Explain the reasons influencing popularity of Android devices and platforms. • Recount a historical overview of the Android operating system platform. • Explain the reasons influencing popularity of Android devices and platforms. • Discuss the Android open-source Operating System and file system structure. • Discuss the value of Android devices to investigators. • Review the mobile communication network architecture and functions. • Explain the SIM file system organization.

Module	Topics
<p>Module 3: Forensic Process Overview</p>	<ul style="list-style-type: none"> • Describe and explore digital forensic media sterilization. • Explain the four phases of the digital forensics process • Recognize legal considerations for seizing and searching devices. • Describe the first responder's role • Describe the digital forensics practitioner's role • Describe the importance for proper evidence handling and documentation. • Relate the correct procedures for identifying and handling digital evidence devices as first responders. • Identify investigative challenges that apply to the digital forensic processing of mobile devices. • Identify tools and equipment needed to seize mobile devices as evidence. • Recognize legal considerations for seizing and searching devices. • Identify various locking mechanisms found on mobile devices. • Demonstrate of the procedures used to seize mobile devices in a manner that preserves evidence integrity. • Relate the different varieties of Android security features and complications the protection mechanisms present to examiners and investigators. • Relate the different varieties of iOS security features and complications the protection mechanisms present to examiners and investigators. • Describe the uses for UFED Camera Services. • Relate the correct procedures for post-process handling of digital evidence devices.
<p>Module 4: Extraction Methodologies</p>	<ul style="list-style-type: none"> • Compare UFED 4PC Logical and Ultimate forensic solutions. • Discuss the methods frequently employed by forensic examiners to acquire data from mobile devices. • Identify best practices for the extraction of data from digital evidence devices. • Describe the uses for UFED Camera Services. • Review the value and use of hash values for evidence authentication. • Modify UFED Touch2 and UFED 4 PC configurations for the extraction of different devices and investigative needs. • Identify functions used within UFED Touch, UFED Touch 2 or UFED 4PC to perform supported data extractions.

Module	Topics
Module 5: Data Encoding and Storage	<ul style="list-style-type: none"> • Describe data encoding schemes used by mobile devices to store information; including Binary, Hexadecimal, ASCII, and Unicode formats. • Differentiate Wear Leveling and Garbage Collection as the functions influencing flash memory data. • Identify basic flash storage characteristics and NAND organization
Module 6: Cellebrite Reader	<ul style="list-style-type: none"> • Discuss Reader capabilities • Understand how an UFDR file is created • Import a UFDR file into Reader for analysis and reporting • Learn to Tag and filter a UFDR Report • Create reports from Reader files
Module 7: Final Exam	<ul style="list-style-type: none"> • Complete a , knowledge-based and assessment • Evaluate the course components using the Feedback Survey • Download a Certificate of Attendance • Download a Certificate of Completion (if awarded)*

Important: Successful completion of this course is defined as the student being able to demonstrate proficiency in the Course Learning Objectives by passing a Final Exam assessment with a minimum score of 80.00% or higher to be awarded a Certificate of Completion.

Get skilled. Get certified.

Every day around the world, digital data is impacting investigations. Making it intelligent and actionable is what Cellebrite does best. The Cellebrite Academy reflects our commitment to digital forensics excellence; training forensics examiners, analysts, investigators and prosecutors around the world to achieve a higher standard of professional competency and success.

Learn more at cellebritelearningcenter.com

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