

Video Evidence Recovery and Analysis Course (VERA)

Global **investigative training**



Level

Intermediate

Length

Four days (28 hours)

Training Track

Investigator

Delivery mode

Instructor-Led

Course description

The Video Evidence Recovery and Analysis Course (VERA) is four-day intermediate-level course designed to introduce investigators, examiners and analysts to digital video technology and to meet the specific needs of the digital video examiner and analyst.

Students will learn proper methods to interrogate digital video evidence while receiving guided instruction throughout the process of recovering valuable evidence from video images. The course will also focus on specialized investigative techniques for the examination of video to explore issues relating to the use of force, speed estimation and identification. A variety of DVR, body-worn and in-car video sources will be examined in depth, testing data acquisition, file identification, image accuracy, video processing work flows and report writing. The course will provide students with an understanding of best practices and methodologies for extracting and examining digital media evidence while providing students with focused, practical use of DVR Examiner and iNPUT-ACE. Upon successful completion of the course, students will be offered an opportunity to take an industry-recognized certification examination, created in partnership with DME Forensics and iNPUT-ACE.

Course objectives

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

- Understand video standards, frame rates and aspect ratios.
- Recognize compression, codecs, file formats and containers
- Understand Digital Video Recording devices and technology
- Demonstrate Best practices and methods of video extraction
- Accurately document video extractions
- Demonstrate the hands-on use of DVE Examiner and iINPUT-ACE

Module	Description and objectives
Introduction	<ul style="list-style-type: none">• Cellebrite's core training and certification process.• Cellebrite's accolades and accomplishments.• Recognizing the current tools and solutions used in digital investigations.• The legal responsibilities of investigators conducting digital investigations.
Basic Technical Overview	<ul style="list-style-type: none">• Digital Video Terminology• Digital Video Definitions• Digital Video Technology
Traditional DVR Acquisition and Recovery	<ul style="list-style-type: none">• Traditional acquisition methods• USB Export• DVR Interface• Cloning• Analog output• Screen Recording
Traditional Playback and Processing of Digital Video Evidence	<ul style="list-style-type: none">• Proprietary players• Screen Captures• Transcoding vs. Rewrapping• Codecs
Simplified Acquisition of Digital Video Evidence	<ul style="list-style-type: none">• DVR Examiner Hands-On Overview• Basic Walkthrough of the DVR Examiner User Interface• Demonstration of the "easy and better way" to acquire digital video evidence
Simplified Processing of Digital Video Evidence	<ul style="list-style-type: none">• iINPUT-ACE Hands-On Overview• Basic Walkthrough of the iINPUT-ACE User Interface• Demonstration of the "easy and better way" to process and analyze digital video evidence
Legal and Evidentiary Considerations	<ul style="list-style-type: none">• Best Practices• Federal Rules of Evidence, Chain of Custody and Evidence Integrity• Consent, Warrants and Seizure

Module	Description and objectives
Acquisition Best Practices	<ul style="list-style-type: none"> • Bag and Tag • Date/Time Offsets and Logging Serial Numbers • Contacting Owner for Information • Use of Write-Blockers • Imaging and Hands-on Hashing • DVR Disassembly
DVR Examiner Overview	<ul style="list-style-type: none"> • DVR Examiner in Depth • DVR File Structures • Date/Time Filtering • Inaccessible Data • Extracting Video Clips and Saving Projects
Building Projects with iINPUT-ACE	<ul style="list-style-type: none"> • Focused hands-on instruction on the use of iINPUT-ACE to build projects. • Organizing File List / Projects • Marking / Grouping Images • Saving / Reloading Projects
Technical Considerations Processing Digital Video	<ul style="list-style-type: none"> • Infrared Considerations • Interlacing • Aspect Ratio • Refresh Rates • Frame Hashing / Rewrapping
Video Compression Overview	<ul style="list-style-type: none"> • Spatial Compression • Temporal Compression • Macroblock Analysis • Video
Building Narrative Reports with iINPUT-ACE	<ul style="list-style-type: none"> • Building a Narrative Report • Creating Demonstrative Exhibits • Sub-Clip Concatenation • Working with a Case • Reporting
Hands-On Practical Acquisition	<ul style="list-style-type: none"> • Students are provided with a scenario. • Students use practical skills learned to acquire digital video from several digital video sources.
Hands-On Practical Processing and Reporting	<ul style="list-style-type: none"> • Students will build upon digital video acquired during the acquisition hands-on practical exercise • Students will apply techniques learned and process the mock-scene video. • Students will prepare a report on their findings.

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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