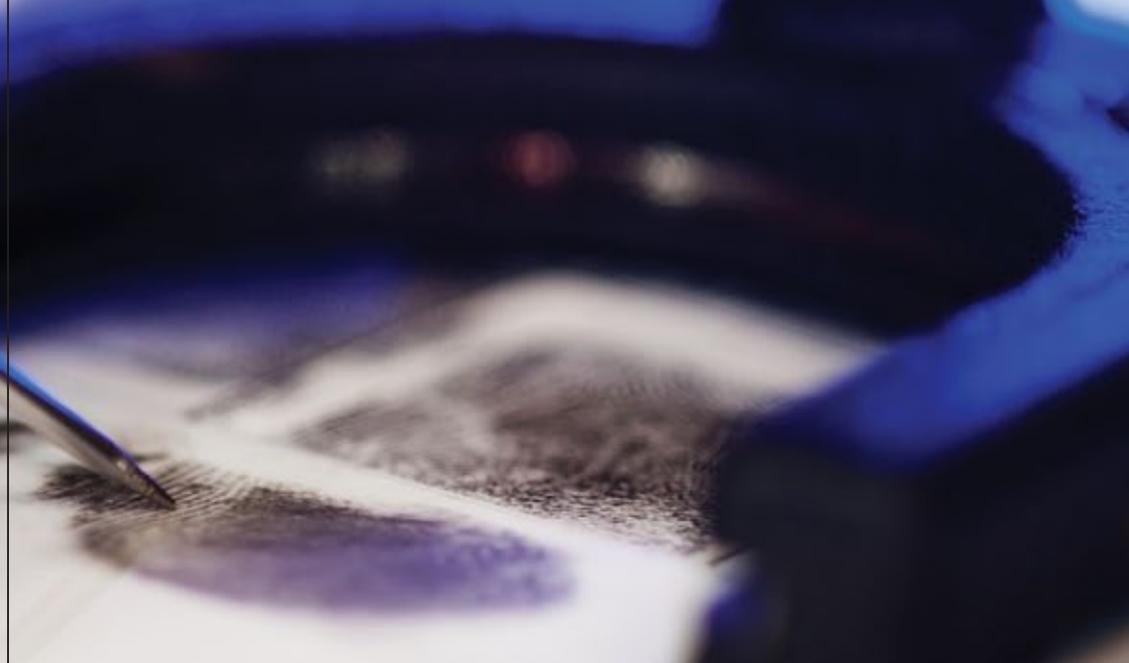


# FORENSIC PHOTOGRAPHY TRAINING

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RISK  DIVERSION  
YOUR TRUSTED FORENSIC PARTNER



Our skilled and experienced team has access to the only privately-owned Fingerprint Laboratory in Africa to process exhibits and extract critical evidence using the latest state-of-the-art investigative equipment that is generally unavailable to the private forensics market.

### **SOPHISTICATED SCENE-INVESTIGATION CAPABILITIES**

#### **Our scene-investigation services include:**

- Processing and documentation;
- Expert consultation to victims during processing;
- Photography and processing of this evidence;
- Recovery of latent fingerprint, footwear and tyre-track evidence;
- Reconstruction and three-dimensional-rendering, as well as supporting clients prepare this evidence for court hearings; and
- Assisting clients with third-level detail, Ridgeology and preparation of ACE-V for court hearings.

#### **Our specialised equipment for scene-investigation work includes:**

- PoliFlare and two handheld forensic light sources;
- High-quality fluorescent powders and brushes for processing;
- Chemicals for advanced print processing;
- High-end photography equipment, including forensic filters and adaptors;
- FlareCam to optimise print photography work on scenes; and
- A state-of-the-art platform that supports advanced photography work.

### **CUTTING-EDGE FINGERPRINT-PROCESSING CAPABILITIES**

#### **Our fingerprint laboratory investigation service encompasses:**

- Collection of items with possible transfer marks for processing;
- Consultation on processing;
- Chemical processing of exhibits;
- Capturing developed results;
- Enhancing captured results using specialised software;
- Enhancing faded or obliterated text, or writing on documents;
- Processing, capturing and enhancing large volume items for corporate clients;
- Photographing evidence and processing it;
- Advanced photography, such as fluorescent, near infrared, episcopic and macro; and
- Processing documentation.

#### **Our fully-equipped laboratory houses cutting-edge equipment and consumables, including:**

- Chemicals and reagents required to process porous and non-porous objects for fingerprints;
- Advanced PL500 Forensic light sources and barrier filters; and
- A sophisticated station to capture the developed prints.

## STATE-OF-THE-ART SOFTWARE FOR SCENE AND LAB PROCESSING

Our specialised software for scene and fingerprint laboratory investigation work includes:

- **Image Capture (Nikon Scene Interface):** Easy to configure, this solution facilitates wired image transfer from full frame Nikon D700, D800 and D810 cameras to work stations.
- **Image Authentication:** This technology ensures that digital photographs cannot be altered without detection.
- **Assisted Image Management:** This solution facilitates the efficient downloading and authentication of images from cameras and memory devices, while also automating the creation of digital negatives and working copies, in addition to the management of these in folder structures and on external drives.
- **Image Extreme:** This software has been developed specifically for the forensic industry to improve contrast between ridge detail and its background. Notably, it is the only technology available on the market that enables ridge details to be added or removed during the image-manipulation processes.
- **Court Chart Generator:** This technology enables the effortless generation of fingerprint comparison reports, or court charts for presentation purposes.
- **Wireless Scene Interface:** This crime scene capturing solution with easy configurable software facilitates wireless image transfer from full frame Nikon D700, D800 and D810 cameras to a workstation.

## COMPARISON OF FRICTION RIDGE DETAILS

A comparison of friction ridge transfers is undertaken by experienced latent print examiners and strictly according to accepted methods. This service entails:

- Taking inked prints for comparison purposes;
- Comparing latent, or unknown prints to known prints;
- Comparing known prints to inked fingerprints on documents; and
- Verifying comparison conclusions.

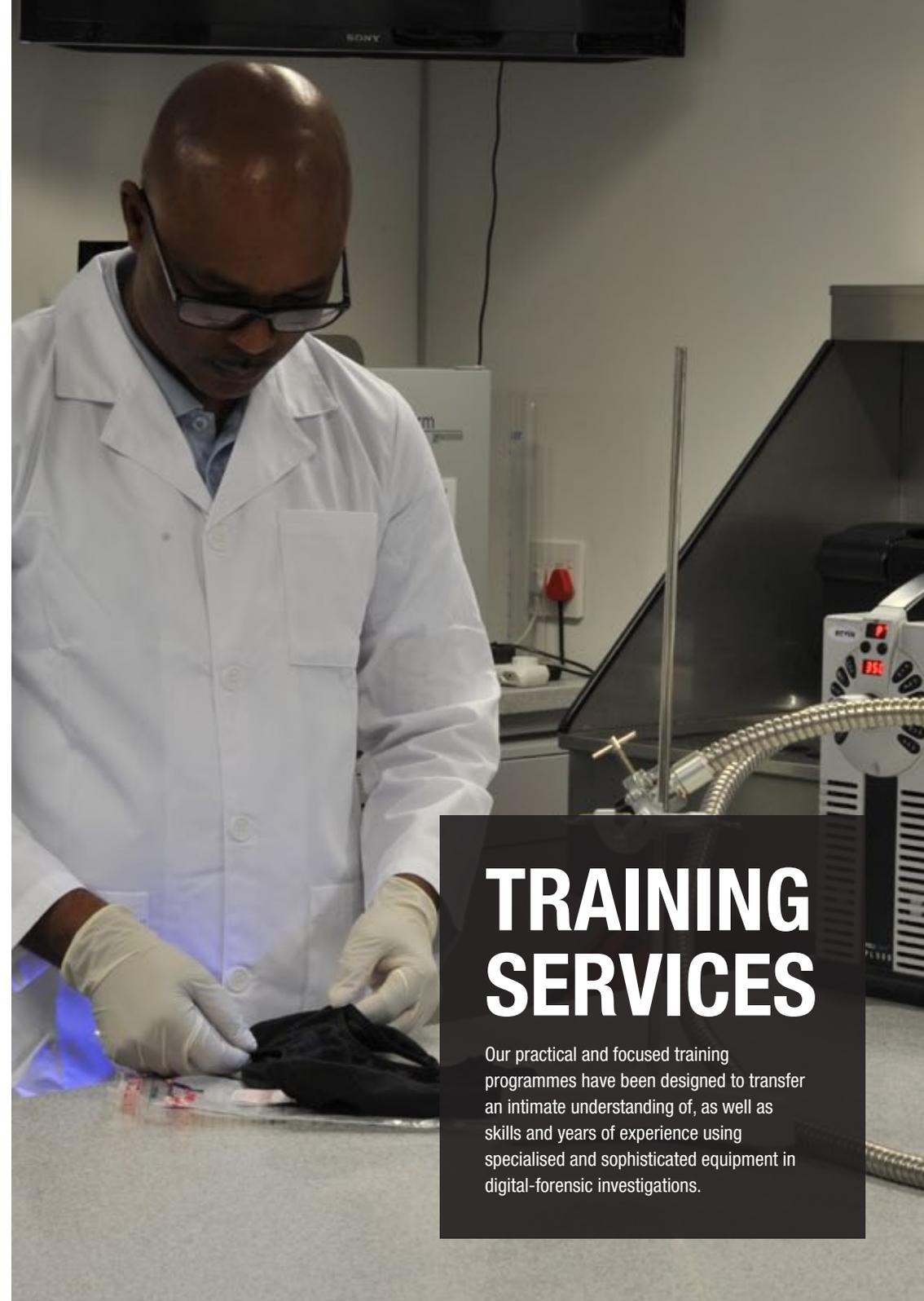
## ADVANCED VISUAL REPRESENTATION SOLUTION

We have advanced technology and software to create professional electronic visual presentations, or “Virtual Tours”, to place the audience in any type of crime scene.

## LEADING FORENSIC INVESTIGATION CAPABILITIES

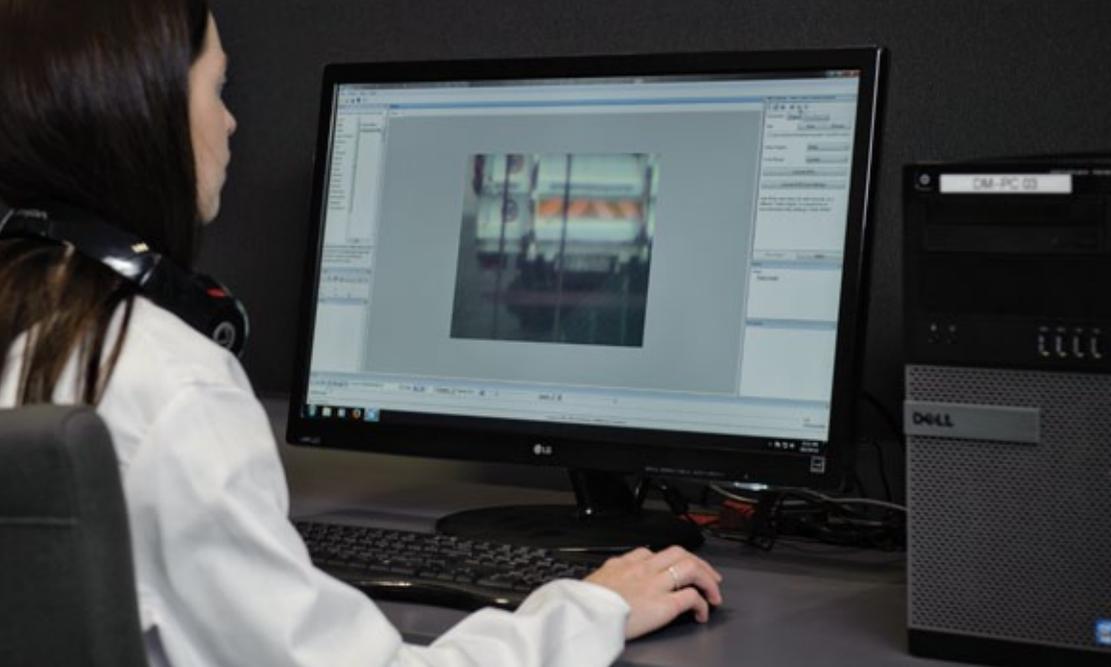
Our team is well versed in the:

- Design of processes to optimise the use of specialised and advanced equipment at crime scenes;
- Design of optimised processes for the photography of prints using advanced capturing stations, forensic lights and barrier filters;
- Design of optimised processes for fingerprint processing in the Fingerprint Laboratory in line with international best practices; and
- Use of forensic light sources, fluorescent powders, chemicals and reagents, in addition to the specialised processes associated with these technologies.



# TRAINING SERVICES

Our practical and focused training programmes have been designed to transfer an intimate understanding of, as well as skills and years of experience using specialised and sophisticated equipment in digital-forensic investigations.



# ONE DAY WORKSHOPS

## 1 BASIC PHOTOGRAPHY

### **PURPOSE:**

This workshop focuses on basic camera operational skills and photography principles.

### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers.

### **LAYOUT:**

Content includes camera and equipment layout, in addition to exposure settings, lens use and depth of field.

All relevant technology and software are available for this workshop, and participants only require their own cameras.

## 2 COLLECTION OF ITEMS WITH POTENTIAL EVIDENTIAL VALUE

### **PURPOSE:**

This workshop equips participants with a sound understanding of the techniques deployed in crime-scene management; the collection of physical evidence; the Locard principle; chain of custody; and evidence possibilities. This is in addition to the capabilities of a fingerprinting laboratory and basic processes deployed in such a facility.

### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers

### **LAYOUT:**

The course covers evidence collection equipment and consumables, in addition to the generation of reports.

All relevant technology and software are available for this workshop, and participants only require their own cameras.

## 3 CRIME-SCENE MANAGEMENT

### **PURPOSE:**

This workshop focuses on the techniques used to control, secure and protect a crime scene to preserve physical evidence.

### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers.

### **LAYOUT:**

The course covers physical evidence, as well as crime-scene management, including techniques used to control, secure and protect such evidence.

All relevant technology and software are available for this workshop.

# TWO DAY WORKSHOPS



## 1 CRIME SCENE AND VICTIM PHOTOGRAPHY

### **PURPOSE:**

This workshop focuses on the techniques used in crime-scene photography and the operation of a digital single-lens reflex camera.

### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers.

### **LAYOUT:**

The workshop covers camera and equipment layout, in addition to photographic techniques using lenses, flash, exposure settings and depth of field, as well as basic image management.

All relevant technology and software are available for this workshop, and participants only require their own cameras.

## 2 MACRO PHOTOGRAPHY

### **PURPOSE:**

This workshop focuses on various techniques deployed in macro and close-up photography.

### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers.

### **LAYOUT:**

The workshop covers camera and equipment layout, lenses, exposure settings, depth of field, macro photography equipment and settings, as well as basic image management marking and scale.

All relevant technology and software are available for this workshop, and participants only require their own cameras.

## 3 LOW-LIGHT PHOTOGRAPHY

### **PURPOSE:**

This workshop focuses on the various techniques used in low-light photography.

### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers.

### **LAYOUT:**

The workshop covers camera setup for low lighting conditions, including camera settings, use of flash and external lighting equipment.

All relevant technology and software are available for this workshop, and participants only require their own cameras.

## 4 CRIME SCENE IMAGE MANAGEMENT

### **PURPOSE:**

This workshop focuses on the management of photographs taken at crime scenes.

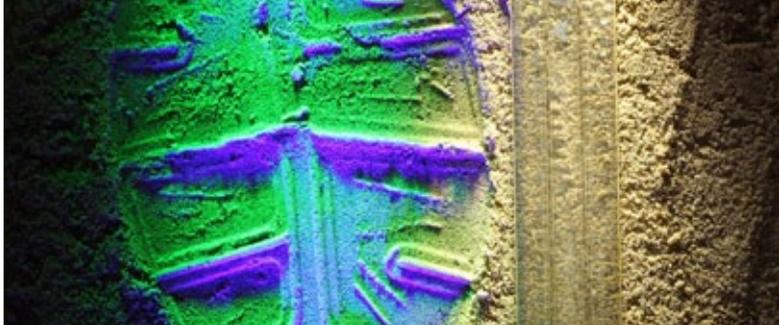
### **TARGET GROUP:**

It is geared at police services, private crime-scene investigators, certified fraud examiners and prosecuting authorities, in addition to legal professionals, medical and emergency-management service providers and private photographers.

### **LAYOUT:**

The workshop covers camera equipment, as well as image-management and validation software.

We charge a monthly fee for access to our image-management software required for this training programme.



## 5 COURT CHART GENERATOR

### **PURPOSE:**

This workshop focuses on the preparation of a comparison court chart using Court Chart Generator (CCG) software.

### **TARGET GROUP:**

It is geared at police and private fingerprint, questioned document and ballistics experts.

### **LAYOUT:**

The workshop covers scene results, basic enhancement of images, as well as the creation of images for, as well as the preparation and publishing of court charts.

We charge a monthly fee for access to our image-management software required for this training programme.

## 6 USE OF FORENSIC LIGHT SOURCES AND FLUORESCENT PHOTOGRAPHY

### **PURPOSE:**

This workshop focuses on handheld forensic light sources and photographing the results.

### **TARGET GROUP:**

It is geared at military police, private crime-scene investigators, fraud examiners, prosecuting authorities and legal professionals, as well as emergency-management and medical legal services.

### **LAYOUT:**

The workshop covers light in forensic sciences, including alternate forensic light sources and fluorescent powders. This is in addition to camera and equipment layout, as well as the use of lenses, FlareCam, exposure settings, depth of field and basic image management marking and scale.

Appropriate cameras are required for this workshop, while our forensic light sources can be rented by trainees.

# FIVE DAY COURSES

## 1 USE OF FORENSIC LIGHT SOURCES AND PHOTOGRAPHY

### **PURPOSE:**

This course focuses on handheld forensic light sources and photographing the results.

### **TARGET GROUP:**

It is geared at military police, private crime-scene investigators, fraud examiners, prosecuting authorities, legal professionals, as well as emergency-management and medical legal services.

### **LAYOUT:**

The course covers the use of light in forensic sciences, alternative forensic light sources and fluorescent powders. This is in addition to camera and equipment layout, the use of FlareCam, lenses, exposure settings, depth of field, as well as basic image management marking and scale.

Appropriate cameras are required for this workshop, while our forensic light sources can be rented by trainees.

## 2 COURT CHART GENERATOR

### **PURPOSE:**

This course focuses on the enhancement of images with CCG and the drafting of court charts using this software.

### **TARGET GROUP:**

It is geared at military police, private crime-scene investigators, fraud examiners and legal professionals, as well as emergency-management and medical legal services.

### **LAYOUT:**

The course covers computers, ridge characteristics and image enhancement, in addition to preparation, creation and publication of a court chart according to accepted requirements.

Trainees can access our CCG software by paying a subscription fee.

### 3 DIGITAL-IMAGE MANAGEMENT

**PURPOSE:**

This course focuses on the validation of software for digital images, as well as the management of images before and after validation.

**TARGET GROUP:**

It is geared at military police, private crime-scene investigators, fraud examiners, prosecuting authorities and legal professionals, as well as emergency-management and medical legal services.

**LAYOUT:**

The course covers the basics of computers; the way in which files and folders function; digital image management flow; image authentication and verification; assisted image management and processes; as well as administering the Autorun Virus.

Trainees can access our management software by paying a subscription fee.

### 4 LATENT PRINT COMPARISON AND RIDGEOLOGY

**PURPOSE:**

This course focuses on the comparison of latent prints and Ridgeology.

**TARGET GROUP:**

It is geared at military police, private crime-scene investigators, fraud examiners, prosecuting authorities and legal professionals, in addition to emergency-management and medical legal services.

**LAYOUT:**

The course covers the comparison and individualisation of finger-, palm- and footprints; determining whether a latent print is sufficient for comparison purposes; and the anatomical aspects and orientation of latent prints. This is in addition to the application of the ACE-V methodology to compare friction ridge impressions, as well as the articulation of conclusions and findings.

### 5 CRIME SCENE PROCESSING TECHNIQUES

**PURPOSE:**

This course focuses on the techniques deployed during the processing of physical evidence collected from crime scenes.

**TARGET GROUP:**

It is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

**LAYOUT:**

The course covers the manner in which to approach scenes, including contamination planning outcomes, sequence of processing and visual representation. This is in addition to informal crime scene reconstruction, processing and collection, forensic activities and chain of custody.

### 6 CRIME SCENE RECONSTRUCTION

**PURPOSE:**

This course focuses on the scientific methods used to formally reconstruct a crime scene and to prepare a report thereof.

**TARGET GROUP:**

It is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

**LAYOUT:**

The course covers the formulation of investigative questions, information gathering, proving or disproving hypotheses and the interpretation of crime scene information

### 7 CHEMICAL FINGERPRINT PROCESSING AT A CRIME SCENE

**PURPOSE:**

This course focuses on the processing of porous and non-porous evidence using various techniques and photographing the results.

**TARGET GROUP:**

It is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

**LAYOUT:**

The course covers health and safety; the process flow of evidence through the laboratory; capturing and processing porous and non-porous evidence; as well as image management.



## 8 3D CRIME SCENE VISUAL REPRESENTATION

### PURPOSE:

This course focuses on the methods used to three-dimensionally (3D) document a crime and then develop a “virtual tour” to present findings in court.

### TARGET GROUP:

It is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

### LAYOUT:

The course covers 3D capturing of a crime scene using a 360°x180° spherical capturing camera and developing a virtual tour using relevant software. This is in addition to the preparation of the court room and presenting this evidence in hearings.

## 9 COURT ROOM PREPERATION AND PRESENTATION

### PURPOSE:

The course focuses on the role of and challenges associated with advanced electronic visual representations in court. This is in addition to the equipment required, as well the way in which to prepare for and present this evidence in court.

### TARGET GROUP:

The course is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

### LAYOUT:

The course covers equipment and challenges associated with advanced digital court presentations, as well as preparing for and presenting this evidence in court.

## 10 BLOODSTAIN PATTERN IDENTIFICATION AND DOCUMENTATION

### PURPOSE:

This course focuses on identifying different bloodstain patterns at crime scenes, as well as identifying and mapping them for analysis.

### TARGET GROUP:

It is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

### LAYOUT:

The course covers bloodstain pattern terminology; testing and collection methods; identification and mapping of bloodstain patterns; marking and photo documentation of patterns; chemical enhancement of latent bloodstains; enhancement and documentation of identifiable blood transfer marks; and report writing.

## 11 BLOODSTAIN PATTERN ANALYSIS

### PURPOSE:

This course focuses on the interpretation of bloodstains to determine the mechanics and actions involved in acts of violence so as to reconstruct a set of events and event segments.

### TARGET GROUP:

It is geared at police and military, private crime-scene investigators, certified fraud examiners, prosecuting authorities and legal professionals.

### LAYOUT:

The course covers the collection of data for analysis; photographic documentation of the crime scene; physical evidence, such as clothing and weapons; and generating scene reports and those based on lab analysis. This is in addition to the analysis of data to determine actions, events and event segments and to factually prove or refute information provided in statements.