

#### Introduction, Terminology and Principles

- Introduction and Traffic Accident Terminology
- Factors of Traffic Safety:
  - o Human
  - o Vehicle
  - o Road
  - o Environment
  - o Legal
- Principles of the On-scene Investigation

# DAY 2

Securing the Scene of the Accident, Evidence Identification and the On-scene Measurement

- Securing the Scene and Investigator Safety
- Impact crash Phases
- Principles of the On-scene Investigation
- Using Drones and Lidar Technology

## DAY 3

**Evidence Identification, Preservation and Verification** 

- Evidence Identification
  - o Traces that appear before the Point of Collision
  - Traces that appear at the Point of Collision
  - Traces that arise after the Point of Collision
- Accident Evidence Found on the Vehicles
  - o Damage Marks
  - o Material Marks
  - Wiping Marks
  - Casting Marks
  - Abrasion, Melting Marks
  - Seatbelt Examination
- Evidence Verification



**On – Scene Measurement** 

- Measurement Equipment and Measurement Procedures
- Measuring Damages on the Vehicles
- Investigation of the Road Design and Construction Elements Influence
- Characteristics of Rollovers On scene Investigation
- Characteristics of Pedestrian and Animal Collision On scene Investigation

## DAY 5

#### **Traffic Accident Reconstruction**

- Using Software and Additional Resources
- Using Unmanned Arial Vehicles for On-scene Investigations
- Collision Analysis and Reconstruction
  - Driver Reaction Time
  - Determining Speed from the Braking Marks
  - Safe Following Distance
  - Calculating Speed of the Vehicle Lost due to the Damage in the Crash
  - Calculating Speed of Rollover
  - o Pedestrian Collision Calculations
  - o Motorcycle Accident Reconstruction
- Conservation of Momentum Calculations for Accident Reconstructions