



# Traffic Crash Investigation & Reconstruction: The Essential Sequence

**The most respected series of investigation & reconstruction courses available for aspiring & experienced professionals.**

This internationally acclaimed crash sequence begins with an immersive introduction of essential crash investigation techniques, advances through key concepts, and concludes with case-study-driven reconstruction practice. *Each course is a prerequisite for the next in the series.*

## **1 CRASH INVESTIGATION 1**

Our introductory course an in-depth study of the skills needed to investigate a crash scene. Curriculum thoroughly covers techniques for recognizing and recording roadway and vehicle evidence and for collecting information from involved parties and witnesses. Students learn to measure and photograph crash scenes and to create sketches and diagrams. Crash 1 also introduces the use of electronic devices for collecting and recording at-scene data.

## **2 CRASH INVESTIGATION 2**

Curriculum emphasizes vehicle behavior in crashes, damage analysis, laser-based measuring devices and mapping software, and advanced evidence-location skills. Other topics include hit-and-run investigations, obtaining follow-up information, and technical report writing. Students also complete our Crash Data Retrieval Operator course as a unit within Crash 2 and are introduced to applying drones to crash investigations.

## **3 VEHICLE DYNAMICS**

Covers the dynamics (the mechanics of motion) associated with crashes, providing an introduction to the laws of motion and the mathematical procedures relevant to crash reconstruction. Exposure to high school-level physics, algebra, and geometry is helpful.

## **4 TRAFFIC CRASH RECONSTRUCTION 1 80 ACTAR CEUs**

Emphasizes techniques for analyzing and interpreting data from an initial investigation in order to describe the events that led to impact and collision. Curriculum includes engineering mechanics, vehicle behavior, human factors, time-distance & drag factor analyses, EDR, and special velocity calculations.

## **5 TRAFFIC CRASH RECONSTRUCTION 2 80 ACTAR CEUs**

Expands on concepts from Traffic Crash Reconstruction 1, with a focus on energy-based analysis. Participants study such topics as energy and damage energy, occupant behavior, momentum and energy analyses, Monte Carlo statistical analysis, and an introduction to force balance.

## **Register now**

**NUCPS.NORTHWESTERN.  
EDU/CRASH**

### **HOST & LOCATION:**

Merrillville Police Department  
7820 Broadway  
Merrillville, IN 46410

### **COURSES DATES:**

**CRASH INVESTIGATION 1**  
June 5 - 16, 2023

**CRASH INVESTIGATION 2**  
July 10 - 21, 2023

**VEHICLE DYNAMICS**  
August 14 - 18, 2023

**TRAFFIC CRASH  
RECONSTRUCTION 1**  
September 11 - 25, 2023

**TRAFFIC CRASH  
RECONSTRUCTION 2**  
October 2 - 13, 2023