



TRAFFIC CRASH RECONSTRUCTION **2**

Launch your reconstruction skills into a new level.

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Traffic Crash Reconstruction 2 (TCR2) is the fifth and final course in our core series and is a continuation of the skills learned in Traffic Crash Reconstruction 1. Students receive expert instruction through lecture and daily real-world case studies, which tie lectures to hands-on analysis. Those students who successfully complete this course will possess the requisite skills for professional traffic crash reconstruction.

In TCR2, students expand on their understanding of crashes and learn to analyze collisions using conservation of energy and delving into special velocity calculations for such situations as vehicle falls, flips, and rollovers. Participants obtain basic skills for analyzing EDR data and how to apply it to traditional reconstructions. They also are introduced to the Monte Carlo Statistical Analysis and learn to solve momentum-based crash sequences using spreadsheet analysis.

TCR2 is a prerequisite to many of our advanced elective courses and is based on our authoritative textbook, *Traffic Crash Reconstruction*.

CURRICULUM TOPICS

- Work & energy
- Damage energy
- Energy & momentum
- Force balance
- After-impact drag factors
- Occupant kinematics
- Light vehicle event data recorder (EDR) usage in crash reconstruction
- Heavy vehicle EDR usage in crash reconstruction
- Special velocity calculations, including sideslip, falls, vaults & flips
- Monte Carlo Statistical Analysis

REGISTER NOW!

ON-GROUND OR REMOTE

TO REGISTER OR LEARN MORE,
SCAN THE QR CODE
OR VISIT

nucps.northwestern.edu/crash



PREREQUISITES:

Crash Investigation 1 & 2; Math & Physics Review for Crash Reconstruction; Vehicle Dynamics; Traffic Crash Reconstruction 2