Crash Data Retrieval Analysis & Applications

Advance your CDR knowledge to a new level of performance.

COURSE CONTENT:

- CDR / EDR terms & conventions
- Airbag deployment decision-making basics
- Crash sensing & critical timelines for decision making & other system inputs
- Crash Pulse recording methodologies (e.g., g vs. time or delta-v)
- Delta-V recording variations: which systems record x-axis only; which record x & y axis; and, for what time periods
- Calculating principle direction of force from CDR data
- NHTSA CFR 49 Part 563 Rule with examples
- Pre-crash data sources & impacts on accuracy
- And More!

Traffic crash reconstruction professionals gain an understanding of the function of the Event Data Recorder (EDR) information that is obtainable from electronic control modules present in most late-model vehicles. Among its many topics, this five-day course covers Crash Pulse recording methodologies, crash sensing and critical timelines, delta-v recording variations, and airbag system–deployment decision making related to recorded data within the airbag control modules of CDR-supported vehicles.

Using case examples, CDR reports from actual crashes, and some crash tests in course material, the curriculum includes each generation of modules for all supported vehicle families, including line-by-line analysis of most parameters. Students receive copies of the CDR reports used in class for later reference.

Instructors also discuss applying data to the crash at hand, including delta-v and closing-speed analysis, principle direction of force (PDOF) calculation and applications, and comparison of such precrash parameters as vehicle speed, throttle position, engine speed, and brake application. Further lessons involve methods of comparing internally recorded data, information from external sources and how they handshake for comparison, and using CDR data in a situationally appropriate reconstruction.

Register Now

REGISTRATION

Use the QR code to find an upcoming course or visit **nucps.northwestern.edu/crashelectives**

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