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.