



VEHICLE DYNAMICS

Master the essential math & physics for advancing to Traffic Crash Reconstruction.

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Vehicle Dynamics expands on the lessons from Math & Physics Review for Crash Reconstruction and delves deeper into the application of mathematic and physics concepts and formulas in traffic crash reconstruction. The course focuses on mechanics, the study of motion and forces, and the effects of such forces during a crash.

Vehicle Dynamics teaches the mathematical procedures and the applied physics necessary for successful completion of Traffic Crash Reconstruction 1, Traffic Crash Reconstruction 2, and other advanced reconstruction courses.

Students study Newton's Laws of Motion and the proper use of physics principles to equations of motion to solve for velocity, time, acceleration, and distances of travel. Instruction to such advanced topics as vehicle braking, drag factors, and coefficients of friction and time-distance analysis.

Please note that instructors assume that all participants have working knowledge of the skills taught in Math & Physics Review for Crash Reconstruction.

CURRICULUM TOPICS

- Newton's laws of motion
- Coefficient of friction
- Drag factor
- Solving for velocity, time, acceleration, & distance
- Momentum - collinear (inline)
- Time-Distance Analysis
- More!

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**