Northwestern

CENTER FOR PUBLIC SAFETY

2025 / 26 COURSE CATALOG

Simply the Best.

Unsurpassed Public Safety Education since 1936.

- LAW ENFORCEMENT MANAGEMENT & LEADERSHIP
- CRASH INVESTIGATION & RECONSTRUCTION
- POLICE MOTORCYCLE INSTRUCTOR TRAINING
- ONLINE, ON-GROUND

Find Your Next Class!

nucps.northwestern.edu

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3 THE NORTHWESTERN ADVANTAGE

For nearly 90 years, Northwestern University Center for Public Safety has set the standard in law enforcement continuing education. Our Leadership & Management, Crash, and Motorcycle programs are recognized globally as benchmarks of excellence.

Our courses continually evolve to meet the changing landscape of public safety—integrating the latest in law enforcement leadership, investigative technologies, and vehicle systems. Guided by innovation and thought leadership, our courses are designed to meet the real-world needs of today's professionals and the organizations they serve.

1 THE GOLD STANDARD

We offer excellence that can only be found at Northwestern University. Tens of thousands of our course graduates are serving in agencies and organizations throughout the US and around the world.

2 COMPREHENSIVE COURSES

The depth of our programs enables you to find the right course at the right time and in a convenient location.

3 NATIONALLY RECOGNIZED INSTRUCTORS

Our expert instructors combine academic proficiency with on-the-job experience to provide the highest quality on-ground or online educational experience.

4 IMMEDIATE IMPACT

Our courses make an immediate impact on officer and agency performance. Students advance their skills and techniques and sharpen their analytical and critical thinking — all of which help agencies to reduce risk, avoid liability, drive efficiency, and advance strategic goals.

4 HOST A COURSE

Our experienced, efficient staff coordinates classes at host agencies throughout the U.S. and abroad and are committed to making your hosting experience easy and hassle-free. Host agencies earn free seats and provide an opportunity for students to participate course closer to home.

NO-FEE HOSTING EXPERIENCE

Open Registration course hosts incur no out-of-pocket costs to host a course. NUCPS manages student registration and tuition billing.

NUCPS PROVIDES

- Instructors, books and most course materials
- Promotional flyers
- Course listing on the NUCPS website and in e-blasts to prospective students
- Student registration and billing.

THE HOST AGENCY PROVIDES

- Course promotion to local law enforcement agencies.
- A classroom with internet access that meets general course requirements.
- A contact person who can assist instructors during the course as well as help students and prospective students with such basics as suggestions about hotels, restaurants, and parking.

EARN FREE TUITION

Depending on the number of registered paying students, the host agency can earn up to four free seats in the course it is hosting.

PLAN AHEAD

We recommend **planning at least nine months to one year in advance**. Lead time is critical for effective marketing, for potential students to secure funding, and for agencies to make arranagements for the needed time to attend.

HOTEL, MEALS & TRANSPORTATION

Hosts may provide students with options and recommendations but are not required to book hotels, schedule meals, or provide transportation.

LEARN MORE!
Scan or Visit
nucps.northwestern.edu/hostacourse

5 LEADERSHIP & MANAGEMENT

Northwestern University Center for Public Safety offers the only certificate courses of their kind from a Top 10-ranked university. Our programs have helped tens of thousands of officers and executives develop the leadership skills and acumen that are essential to success in any law enforcement leadership role, from new front line supervisors to experienced chiefs and senior command staff.

We work with all types of public safety organizations to create safer communities. Our management courses are available for public safety professionals from local, state, county, and federal organizations, as well as universities, medical systems, and other public or private entities. Our course directors and instructors are all authorities in their fields.

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LEADERSHIP & MANAGEMENT
New & Rising Supervisors

SUPERVISION OF POLICE PERSONNEL

COURSE FORMATS
- 2 weeks on-ground (80 hours / 10 days)
- Asynchronous online

PREREQUISITES
None

EARN COLLEGE CREDIT
On-ground graduates earn 1 unit of quarter system credit from Northwestern University.

Supervision of Police Personnel (SPP) prepares law enforcement officers for success in their new positions as first-line supervisors. The lessons learned in this class will benefit students throughout their careers.

SPP is designed for first-time police supervisors and officers with little or no formal managerial training. Our adjunct instructors — current or former police leaders — teach students the basic yet critical skills they need as front-line supervisors. Our authoritative curriculum focuses on understanding human behavior and day-to-day professional relationships with subordinates, superiors, and the public and encompasses the leadership challenges involved in managing in today's environment.

Students complete this integral program understanding that what action they take — how they implement those actions — can be the difference between success or failure on the street or in their department.

CONTENT
- Accountability
- Communication
- Critical incidents
- Decision making
- DiSC© Personal Profile System
- Discipline
- Ethics & professionalism
- Elements of dynamic leadership
- Managing problem employees
- Motivational principles
- Officer wellness
- Performance management
- Planning
- Procedural justice

New! SUPERVISION OF TRAFFIC CRASH INVESTIGATION UNITS

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
None

Developed specifically for first-line supervisors who coordinate their agency's crash units, this one-week course teaches the basic management and communications skills required for leading efficient and cohesive crash teams.

Following a back-to-basics review of crash investigation and reconstruction, our instructors introduce leadership and motivational principles, communication techniques, decision making, and more. Instruction emphasizes the importance of accurate and thorough data collection, and the class features a unit on technical report writing and reviews.

Our curriculum enhances the learning experience with an innovative mix of academic principles and practical applications. With an emphasis on student interaction and participation, this course blends concepts and strategies with practical, hands-on how-to's.

CONTENT
- Review of basic Crash Investigation & Reconstruction principles
- Team development
- Data accuracy
- Leadership
- Communication techniques
- Decision making
- Ethics
- CDR & Crash Reconstruction
- Crash scene video analysis and application to reconstruction
- Technical report writing

LEARN MORE!
Scan the QR code or visit **nucps.northwestern.edu/register**

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LEADERSHIP & MANAGEMENT
Executive Management Program

COURSE FORMATS
- 3 total weeks on-ground

ENROLLMENT REQUIREMENTS
Participation is limited to senior-level command or experienced mid-level public safety managers.

RECENT TOPICS
- Critical Incident Command
- Media Relations
- Leading in a Political Environment
- Information Technology
- Data Collection & Profiling
- Discipline & Accountability
- Ethics
- Executive Image
- Crime Prevention Strategies
- Human Resources
- Officer Selection, Assessment & Promotion
- Recruitment & Retention
- Risk Management

THE EXECUTIVE MANAGEMENT PROGRAM

Our capstone management and leadership course delves into the critical management issues, advanced topics, and current trends that senior leadership face — all presented in a seminar environment.

EMP features daily guest speakers who present on current topics in their fields of expertise. Each day dawns with a different speaker and a different topic from a continually revised slate of advanced managerial concepts. Among the issues that recent participants have examined are Ethics & Legal Updates, Officer Assessment & Promotion, Recruitment & Retention, Media Relations, Critical Incident Command, and Leading in Crisis, among many others.

To enhance the discussion and learning between students, enrollment is limited to chiefs, deputy chiefs, sheriffs, and other experienced senior and mid-level public safety managers.

Participants complete EMP with enhanced knowledge informed by our expert speakers, lively class discussions, and professional networking — and are ready to proactively respond to meet the most challenging of emerging demands.

LEADERSHIP & MANAGEMENT
School of Police Staff & Command

COURSE FORMATS
- 10 total weeks on-ground (40 hours per week)
- 5 months online (asynchronous)

PREREQUISITES
2+ years as a mid- or upper-level supervisor or manager

UNIVERSITY CREDIT
Successful online and on-ground earn 6 units of credit from Northwestern University.

CONTENT
- Budgeting
- Contemporary policing
- Decision making
- Employee relations
- Recruiting
- Evaluating products/services
- Executive image
- Human resources
- Leadership & management
- Communications
- Organizational behavior
- Strategic planning & policies
- Project management
- Resource allocation
- Statistics
- More!

LEARN MORE!
Scan or Visit **nucps.northwestern.edu/spsc**

THE SCHOOL OF POLICE STAFF & COMMAND

SPSC offers the most academically rigorous leadership and management program available for public safety professionals.

Since 1983, more than 23,000 students have graduated from more than 600 of our unparalleled SPSC programs. Agencies throughout the U.S. and around the globe recognize SPSC's important impact on their organizations. Through our dynamic mix of academic principles and practical applications, SPSC focuses on the topics that are crucial for helping experienced law enforcement professionals succeed in senior command positions.

Reaching beyond concepts and strategies, SPSC also teaches participants how to effectively implement strategies, apply concepts, and effectively lead in daily and critical situations.

Time and again, SPSC graduates have proven that they are better prepared to:

- Think globally rather than remain task-oriented;
- Deliver services effectively and efficiently;
- Successfully accomplish team-oriented projects and tasks;
- Analyze the environment;
- Mitigate legal exposure; and,
- Develop systems of accountability.

COLLEGE-LEVEL COURSE WORK
- Significant out-of-class reading & writing assigments
- Mathematic operations, including algebraic notation
- Final staff study research paper
- In-class exams
- Required discussion participation

"Every lieutenant, manager, director, assistant chief, and chief should attend this course. [SPSC] was academically challenging and helpful . . . It's so much more applicable than going to FBI Academy. There are so many areas taught at SPSC that make us better. It's not just social networking — the academics were vitally important to know."

— Lt. Hugh Lockerby, Scottsdale (AZ) Police, SPSC #570

9 REGISTRATION INFORMATION

NUCPS TUITION

Cost of tuition varies based on the course, format, and location. Please see individual course sections for tuition details at **registration.nucps.northwestern.edu**.

BOOKS & SUPPLIES

Almost all courses include books and other reading material in the tuition. Students will need to bring a device with internet access, a USB port, and Adobe Reader, such as a laptop or tablet. Motorcycle and some Crash Investigation & Reconstruction courses have additional course supplies that students need to bring. Please see your course section at **registration.nucps.northwestern.edu** for more details.

REGISTERING FOR YOURSELF & OTHERS

We offer easy online enrollment through our website at registration.nucps.northwestern.edu. You will need to log in or create an account in order to register.

You can register multiple students from your agency by adding them to your account. These students must first have their own account. For detailed instructions, please visit **sps.northwestern.edu/center-for-public-safety/faq/registration.html**

CANCELLATION POLICY

Our cancellation policy is available at **nucps.northwestern.edu/faq/cancellation-policy.html.** Please note that cancellations / withdraws must be made using our cancellation form, which is available for download on the cancellation policy

NUCPS ONLINE LEARNING OPTIONS

IN ADDITION TO TRADITIONAL ON-GROUND LEARNING, NUCPS OFFERS THREE VARIETIES of online education: Online Learning, Remote Learning, and Blended Learning. These classes all feature the flexibility of participating from home, work, or any connected space.

Whether you enroll in an online, remote, or blended course, you can be assured that your curriculum content is the same as the course's traditional on-ground counterpart. Alternate formats include:

- Clear course completion deadlines;
- Due dates for assignments and exams that keep you on track and engaged;
- Offline homework, studying, and / or reading assignments. Group projects also may be assigned;
- Class discussion participation requirements (where applicable).

EXPLORE THE DIFFERENT FORMATS

ONLINE LEARNING: ANYTIME, ANYWHERE

Our online courses offer the freedom to learn at your own pace. With discussion questions, videos, digital resources, and online exams, you'll move through the material when it fits your schedule while meeting assignment and participation requirements. Online learning offers **maximum flexibility** — perfect for busy professionals balancing work, family, and education.

- Asynchronous format: Instructors and students do not meet at the same time, although instructors are available during online office hours.
- Flexibility: Students complete coursework and participate on their own time and schedule.
- Course pace: Unless otherwise noted, this format is slower-paced than the on-ground format, spreading coursework out over a longer timeframe for optimum flexibility.

New! BLENDED LEARNING: FLEXIBLE & ENGAGING

Our Blended Learning format combines the convenience of asynchronous online learning with the energy of live classrooms. Each week, you'll join real-time remote sessions with instructors and peers, while recordings ensure you can review content or catch up if you are unable to attend a live session.

- Blended format: combines the flexibility of an asynchronous format with the live sessions of our remote format.
- Weekly remote sessions: usually two days per week, recorded for later review if attendance isn't possible.
- Class interaction: engage with classmates and instructors or view class recording at a later time.
- Course pace: slower-paced than the on-ground counterpart, offering more time to complete assignments.

REMOTE LEARNING: REAL-TIME CLASS, ONLINE CONVENIENCE

Remote courses bring the classroom experience to you. Log in at the scheduled times to learn alongside peers in a live, interactive environment. With attendance, participation, and discussions happening in real time, you'll enjoy the structure and energy of a traditional class without leaving your home or office. Breaks and lunches are built in, just like our on-ground courses.

- Synchronous format: live classes where students log in at a scheduled time.
- Attendance & participation: required and tracked by the instructor.
- Real-time interaction: discussions, lectures, activities, and breaks replicate a traditional classroom.
- Course pace: depending on the course, timeframes may be the same or longer than on-ground courses.

Review All Upcoming Online, Remote & Blended Classes at nucps.northwestern.edu/online

CRASH INVESTIGATION & RECONSTRUCTION
The Core Sequence

Our foundational series is the highest caliber program available for those who want to master the essential skills and proficiencies that constitute the building blocks of crash investigation and reconstruction. Each course in this authoritative series builds on concepts and techniques acquired in the previous course(s) and is a prerequisite for the next class. Our sequence begins with an immersive introduction to essential crash investigation techniques, advances through key math and physics, and concludes with case study–driven reconstruction concepts and hands-on practice.

1 CRASH INVESTIGATION 1
At-Scene Investigation

The moments immediately following a traffic collision are crucial, and only a well-trained crash investigator knows how to identify and collect the necessary information at the crash scene. That critical training begins with Crash Investigation 1, which is based on the most recent edition of our seminal text, *Traffic Crash Investigation*, which is included in the course tuition.

Crash 1 sets students on the path to becoming proficient in the skills required to quickly, successfully, and confidently obtain critical physical evidence and driver and witness information. Our team of expert instructors teach students how to: properly obtain and document at-scene information and evidence; gather information from drivers, passengers, and witnesses; measure and map the crash scene; and, create sketches and after-crash diagrams. Crash 1 also introduces students to EDR technologies and how the data investigators collect are used in crash reconstructions.

COURSE FORMATS

- On-ground (80 hours / 2 weeks)
- Online

PREREQUISITES

None

CONTENT

- Comprehensive intro to crash investigation
- Collecting driver & witness information
- Vehicle inspection protocols & procedures
- Measuring & mapping the crash scene
- Creating sketches & post-crash diagrams
- Intro to Event Data Recorders

"[Crash Investigation 1] will make you think about crashes in a whole new way . . . Extremely informative and has good hands-on application. Once you finish with this course, you feel empowered to handle traffic crashes."
— Wayne R. Jakobitz, Jr., Bourbonnais (IL) Police Dept.

Register for a Core Course! Scan or Visit nucps.northwestern.edu/crashsequence

CRASH INVESTIGATION & RECONSTRUCTION
The Core Sequence

COURSE FORMATS
- On-ground (80 hours / 10 days)
- Online

PREREQUISITES
Crash Investigation 1

CONTENT
- Vehicle damage analysis (describing, reporting & determining direction of forces)
- Vehicle behavior in crashes
- Identifying and interpreting tire marks, road scars & other results of a crash on the road
- CDR Systems Operator course
- Technical report writing
- Lamp filament analysis
- Tire damage analysis & the role of tire failure
- Advanced mapping skills
- Specialized data gathering, measuring devices & other testing

2 CRASH INVESTIGATION 2
Technical Investigation

Traffic crash data is useful only if it is properly collected, interpreted, and analyzed. Participation in Crash Investigation 2 increases the at-scene investigator's professional skill set and enhances their credibility.

Students who successfully complete Crash Investigation 2 develop skills in technically preparing crash investigation data and collecting follow-up data required by reconstructionists, prosecutors, defense attorneys, claims adjusters, fleet supervisors, and highway safety engineers.

Crash Investigation 2 builds upon topics examined in Crash 1 and provides students with greater knowledge of the information available at the crash scene, how to properly collect that data, and how to initiate its interpretation. Like Crash 1, the course is rooted in the latest edition of our authoritative text *Traffic Crash Investigation* and emphasizes vehicle behavior in crashes, vehicle damage analysis, advanced mapping and evidence location skills, technical report writing, and proper preservation of digital evidence collected from collision investigations.

Instructors demonstrate use of such emerging technologies as mapping scenes and recording videos with drones and/or total stations. **Our CDR Systems Operator course (*see page 22*) is included as a unit within Crash 2**, and students who complete Crash 2 are ready to put skills to work in the field, downloading and preserving data from EDRs.

CRASH INVESTIGATION & RECONSTRUCTION
The Core Sequence

COURSE FORMATS
- On-ground
- Remote Learning

PREREQUISITES
Crash Investigation 1 & 2

CONTENT
- Polynomial operations
- Cartesian planes
- Slopes & intercepts
- Linear & quadratic equations
- Euclidean geometry
- Angle measurements
- Trigonometric definitions
- Pythagorean Theorem
- Vectors & their basic operations
- Basic & derived physics quantities
- More

3 MATH & PHYSICS REVIEW FOR CRASH RECONSTRUCTION

Learn or review the math and physics required for success in Vehicle Dynamics and Traffic Crash Reconstruction 1 & 2.

This four-day course is designed for students who want to continue to Vehicle Dynamics, Traffic Crash Reconstruction 1 & 2, and other advanced reconstruction courses but need to learn — or refresh their knowledge of — the math and physics required for successfully participating in those courses, rather than struggling due to missing skill sets.

Lessons begin with the basics of high school-level math and physics and progress through intermediate concepts. Our course instructors review such fundamentals as order of operations, angle measurements, and unit conversions before advancing to more complex topics, such as linear and quadratic functions, vectors, and more. Students learn the proper application of physics to equations in order to solve for velocity, acceleration, and distances of travel. Confidence and abilities are solidified with practice problems.

COURSE FORMATS
- On-Ground (40 hours / 5 days)
- Remote Learning

PREREQUISITES
Crash Investigation 1 & 2; Math & Physics Review for Crash Reconstruction

CONTENT
- Newton's Laws of Motion
- Friction and drag factor
- Basic equations of motion
- Solving for velocity, time, acceleration, and distance
- Momentum - collinear (in-line)
- Time-Distance Analysis
- More!

4 VEHICLE DYNAMICS

Vehicle Dynamics expands from the skills in Math & Physics Review for Crash Reconstruction to the advanced physics and math concepts as applied to 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 advanced math and physics necessary for Traffic Crash Reconstruction 1 & 2, and other advanced reconstruction courses.

Curriculum covers Newton's Laws of Motion and the proper use of physics principles for equations of motion to solve for velocity, time, acceleration, and distances of travel. Once these concepts are understood, instruction continues to vehicle braking, drag factors, and coefficients of friction and time-distance analysis.

Please note: *Instructors assume that students possess working knowledge of the math and physics taught in Math & Physics Review for Crash Reconstruction.*

Register for a Core Course!
Scan or Visit
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ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

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CRASH INVESTIGATION & RECONSTRUCTION
The Core Sequence

COURSE FORMATS
- On-Ground (80 hours / 10 days)
- Remote Learning

PREREQUISITES
Crash Investigation 1 & 2; Math & Physics Review for Crash Reconstruction; and, Vehicle Dynamic

CONTENT
- Engineering mechanics
- Equations of motion
- Vehicle behavior in collisions
- Principal direction of force
- Intro to human factors
- Time-distance analysis
- Conservation of momentum
- Oblique & collinear analysis
- Post-collision drag factors
- Newton's Laws of Motion
- Identifying & analyzing road marks
- Driver strategy & tactics

ACTAR-Accredited Professionals Earn 80 ACTAR CEUs

5 TRAFFIC CRASH RECONSTRUCTION 1
Engineering Mechanics & Momentum

Students synthesize lessons from the previous four courses in order to learn to determine how a crash occurred. Incorporating the latest edition of our seminal textbook ***Traffic Crash Reconstruction***, curriculum focuses on analyzing and interpreting information collected during previous stages of an investigation in order to describe — in as much detail as possible — the crash and the events leading to actual impact. Students apply the lessons from daily lecture material to real-world case study situations — an instruction format that provides students with the training necessary to reconstruct traffic collisions. After successfully completing this course, students will have the ability to reconstruct crash situations using momentum and mechanics.

A copy the latest edition of *Traffic Crash Reconstruction* is included in the course tuition.

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CRASH INVESTIGATION & RECONSTRUCTION
The Core Sequence

6 TRAFFIC CRASH RECONSTRUCTION 2
Energy, Statistics & EDR

COURSE FORMATS
- On-Ground (80 hours / 10 days)
- Remote Learning

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

CONTENT
- Work & energy
- Damage energy
- Energy & momentum
- Force balance
- After-impact drag factors
- Occupant kinematics
- Heavy & light vehicle EDR usage in reconstruction
- Special velocity calculations, including sideslips, falls, vaults & flips
- Monte Carlo Statistical Analysis

Our series capstone course is a continuation of the skills learned in Reconstruction 1 and ties lecture material to hands-on analysis through daily, real-world case studies.

Students initially expand their understanding of crash reconstruction concepts and analyze collisions using conservation of energy. Instructors then move on to cover special velocity calculations for such situations as vehicle falls, flips, and rollovers. Students also learn basic skills for analyzing EDR data and how to use it in traditional reconstructions. Finally, students are introduced to the Monte Carlo Statistical Analysis and learn to solve momentum-based collision sequences using spreadsheet analysis.

Upon successful completion of this course, students will possess the ability to reconstruct crash situations using energy and statistical analysis of momentum-based collision reconstructions.

ACTAR-Accredited Professionals Earn 80 ACTAR CEUs

Register for a Core Course!
Scan or Visit
nucps.northwestern.edu/crashsequence

COURSE FORMAT

- On-ground (16 hours / 2 days)
- Blended Learning *(New! Learn More on page 10)*

CONTENT

- CDR / EDR system components & required tools
- Software installation / configuration
- Selecting the best method of access
- Software operation, step-by-step guides & nuances
- Common error messages & trouble-shooting steps
- Trouble-shooting connections
- Back powering
- Saving imaged data & generating reports
- Basic legal issues

ACTAR-Accredited Professionals Earn 16 ACTAR CEUs

CRASH DATA RETRIEVAL SYSTEMS OPERATOR

This hands-on, entry-level course building proficiency with the Bosch CDR system and knowledge about other platforms, including Hyundai, Kia, Tesla, Toyota TechStream, and GM advanced crash tools. Participants will gain experience in troubleshooting common errors, organizing equipment, and working with modules such as ACMs, PCMs, rollover sensors, and active safety systems. The course also emphasizes legal and evidentiary considerations, including compliance with 49 CFR Part 563, ensuring participants understand both the technical and courtroom implications of their work.

Instructors emphasize in-vehicle connections wherever possible, plus potential impacts of direct-to-module access. The curriculum also includes back-powering methods and accessing vehicle owner's manuals. To develop operational fluency, students **practice using the Bosch CDR System and Hyundai and Kia EDR tools** to back power and image a variety of modules and vehicles.

New Blended Learning format!

This course will be offered online for the first time January 12–25, 2026, through a partnership between NUCPS and Crash Data Specialists, LLC, and includes the same curriculum as its on-ground counterpart. The asynchronous format allows students to complete modules on their own schedule while receiving personal, one-on-one instructor guidance on project work. **No Bosch CDR tool is required, making this the most accessible way yet to gain essential CDR / EDR training.**

Students will unlock and complete training modules sequentially and then coordinate project submissions directly with the instructor on an individual basis. Instructors will provide access to project data and guide participants through each step, ensuring skill development and successful project completion in a virtual environment.

With this flexible, remote-access model, students gain the freedom to learn on their own schedule without sacrificing individualized attention, making this a convenient and comprehensive option for today's crash investigators.

Learn more about Blended Learning on page 10.

Register or Learn More!
Scan or visit
nucps.northwestern.edu/crash

ADVANCED COLLISION RECONSTRUCTION WITH CDR APPLICATION

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
Traffic Crash Reconstruction 1 & 2 and CDR Analysis & Applications

Explore advanced methods for analyzing CDR data in collision reconstructions. Drawing from the skills and lessons taught in Crash Data Retrieval Analysis & Applications, this class takes the data analysis further — with particular emphasis on how to properly use delta-v data to determine impact and post-impact velocities in various crash scenarios. Instructors incorporate a review of pre-crash and delta-v data from currently supported vehicles and may include additional updated CDR information.

The techniques taught in this class can be applied to your reconstructions, and all of the presented projects are based on actual crashes, utilizing data downloads obtained from those collisions.

CONTENT
- Pre-crash data sources & recorded crash pulse data
- Calculating delta-v from acceleration data
- Finding impulse delta-v from x/y delta-v data
- PDOF from x/y delta-v data
- Adjusting x axis delta-v to represent impulse delta-v
- Single Equation Approach to 360˚ Momentum Analysis
- Finding impact & post-impact velocities from CDR data
- Reconciling pre-crash & post-crash CDR data
- Analyzing CDR data in context of a reconstruction

ACTAR-Accredited Professionals
Earn 40 ACTAR CEUs

CRASH DATA RETRIEVAL ANALYSIS & APPLICATIONS

COURSE FORMAT

- On-ground (40 hours / 5 days)

PREREQUISITES

Traffic Crash Reconstruction 1 & 2, CDR Operator

CONTENT

- Terms & conventions in the CDR / EDR field
- Airbag deployment decision-making basics
- Crash sensing & critical timelines
- Idealized timeline for decision making & other system inputs
- Crash Pulse recording methodologies
- Delta-V recording variations & time periods
- Calculating principal direction of force from CDR data
- NHTSA CFR 49 Part 563 Rule with examples
- Pre-crash data sources & impacts on accuracy
- More!

ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

Learn about the function of CDR / EDR data obtained from modules present in most late-model vehicles. Using case studies, CDR reports from actual crashes, and crash tests, instructors cover modules for all supported vehicle families, including line-by-line analysis of most parameters.

Students learn to apply data to the crash at hand, including delta-v and closing-speed analyses, principle direction of force calculation and application, and comparison of such pre-crash parameters as vehicle speed, throttle position, engine speed, and brake application. Other topics include methods of comparing internally recorded data, data from external sources, and how they handshake, Crash Pulse recording methodologies, crash sensing and timelines, delta-v recording variations, airbag system deployment, and more.

All CDR-supported vehicle systems are discussed, including but not limited to:

- BMW vehicles & data from its Advanced Crash Sensing Module (ACSM)
- Chrysler reports & recorded data from its first CDR through most recent
- Ford reports, including ACM and Powertrain Control Modules data elements from its first CDR through the latest ACM, which contains pre-crash data
- Ford PCM data timing relating impact to “time 0” and restraint deployment signal
- GM CDR reports by generation, including Rollover Sensor data & Engineering Translation reports & variants
- Honda CDR reports, including examples from real-world crashes
- Mazda vehicles, including sample reports from real-world crashes
- Mercedes vehicles & their ACM data
- Nissan CDR reports, including a fuse panel guide to assist in back-powering
- Suzuki CDR reports, model-year ACM data, and sources for back powering
- Volvo CDR reports
- Toyota ACM data, from Generation 1 through the newest modules, with & without pre-crash
- Hyundai & Kia EDR Tool reports, content, and data integrity

Register or Learn More!
Scan or visit
nucps.northwestern.edu/crash

ADVANCED DRIVER ASSISTANCE SYSTEMS FOR THE CRASH RECONSTRUCTIONIST

COURSE FORMAT
- On-Ground (28 hours / 3.5 days)

PREREQUISITES:
Crash investigation / reconstruction experience, litigation experience, or an engineering background is a plus

CONTENT:
- Testing & demonstrations at a closed test facility
- Overview of current ADAS technologies
- The SAE Levels of Self-Driving Vehicles
- Identifying and examining ADAS and self-driving technologies
- Standards, protocols & performance parameters
- Liability & litigation
- Media & public perception
- Successes & challenges

Scan or Visit nucps.northwestern.edu/crash

Major auto manufacturers are equipping their new vehicles with ADAS technology — and crash investigators, reconstructionists, attorneys, and other professionals need to "stay ahead of the curve" by learning how ADAS affects their investigations.

Exclusive to NUCPS, this dynamic new course offers a detailed look at the rapidly growing world of self-driving vehicles and ADAS and examines how these technologies impact your crash investigations and reconstructions.

Experience ADAS features on a closed test facility. Former Ford Motor Company auto design engineer, licensed professional engineer, and ACTAR-certified reconstructionist Alan Moore teaches participants how to determine if ADAS was installed, enabled, and functioned as designed in a vehicle associated with a crash. Moore demonstrates ADAS systems at work, and students obtain hands-on experience, even conducting tests and demonstrations at a closed test facility.

After 3-½ days, participants are able to:
- Use available electronic data specifically tailored for ADAS systems;
- Define performance parameters;
- Formulate a plan to approach accident reconstruction involving ADAS;
- Summarize ADAS technologies in current production and under development;
- Identify applicable state & federal regulations; and,
- Explain ADAS' ethical and societal implications.

New! PASSENGER VEHICLE FORENSIC MECHANICAL INSPECTION FOR COLLISION INVESTIGATORS

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
None

Learn to confidently perform forensic mechanical inspections of passenger vehicles.

Forensic work focuses on the throttle, steering, brakes, suspension, wheels, drivetrain, and lamps while also covering passenger airbag and restraint systems. Our experienced instructors provide foundational lessons about each component, then students put those lectures to work by mechanically examining and manipulating that component in a damaged vehicle. This course also incorporates a comparison study of undamaged vehicles to provide a thorough understanding of commonly damaged passenger vehicle components.

Instructors emphasize what to document during a forensic inspection as well as the proper methods for gathering, analyzing, and recording facts about damage, crash conditions, and other relevant circumstances. Students learn how to research information and document technical reports using industry-standard terminology to support their findings.

Successful participants complete this course able to identify parts and pieces of component systems and clearly explain how different components may have factored into a crash.

CONTENT
- Proper forensic investigation methods
- Industry standard terminology
- Research techniques
- Technical report writing
- Hands-on work with damaged vehicles, including brake, suspension, throttle system, wheel, and steering systems

New! SUPERVISION OF TRAFFIC CRASH INVESTIGATION UNITS

COURSE FORMAT
- On-ground (8 hours / 5 days)

PREREQUISITES
None

Developed specifically for first-line supervisors who coordinate their agency's crash units, this one-week course teaches the basic management and communications skills required for leading efficient and cohesive crash teams.

Following a back-to-basics review of crash investigation and reconstruction, our instructors introduce leadership and motivational principles, communication techniques, decision making, and more. Instruction emphasizes the importance of accurate and thorough data collection, and the class features a unit on technical report writing and reviews.

Our curriculum enhances the learning experience with an innovative mix of academic principles and practical applications. With an emphasis on student interaction and participation, this course blends concepts and strategies with practical, hands-on how-to's.

CONTENT
- Review of basic Crash Investigation & Reconstruction principles
- Team development
- Data accuracy
- Leadership
- Communication techniques
- Decision making
- Ethics
- CDR & Crash Reconstruction
- Crash scene video analysis and application to reconstruction
- Technical report writing

HEAVY VEHICLE FORENSIC MECHANICAL INSPECTION FOR COLLISION INVESTIGATORS

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
None

CONTENT
- Heavy vehicle nomenclature
- Braking systems
- Suspension systems
- Wheel systems
- Steering systems
- Proper forensic investigation methods

ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

Crashes involving heavy vehicles often encompass unique documentation and analysis. **This lab-based, hands-on** course features forensic investigation, proper documentation, and evidence preservation for crashes involving heavy commercial trucks. Curriculum includes lecture and hands-on experience with collision-damaged trucks. Forensic work is conducted on the braking, suspension, wheel, and steering systems. Instructors provide foundational information about each component, and students use that knowledge to mechanically examine and test damaged trucks. Additional hands-on training with undamaged trucks provides the opportunity to thoroughly understand components.

By course end, students can demonstrate the restoration of a damaged air-braking system on a heavy-duty truck back to its pre-collision condition for the purpose of collecting data for calculations that are used in evaluating braking efficiency. Students also master the identification of parts and pieces of steering and suspension systems and can clearly explain how the components may have factored into a crash.

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ADVANCED CRASH RECONSTRUCTION UTILIZING HUMAN FACTORS RESEARCH

COURSE FORMAT

- On-Ground (40 hours / 5 days)

PREREQUISITES

Traffic Crash Reconstruction 1 & 2; Microsoft Excel proficiency is strongly encouraged

Obtain a better understanding of the human role in various crash scenarios and learn to compare and evaluate human actions. Curriculum includes driver and pedestrian behaviors, response and reaction times, delayed response, recognition and perception, nighttime recognition and impairment, and more. Participants also are introduced to Driver Research Institute's Response, a cloud-based tool that helps analyze driver responses. Students receive a 7-day trial and learn how to incorporate it into their reconstructions.

CONTENT

- Perception-response time
- Interactive Driver Response Research (IDRR)
- Driver decision-making
- Nighttime recognition
- Gap acceptance for left & right turns
- Through movements for drivers, riders & pedestrians
- Pedestrian walking speeds
- Acceleration
- Lateral acceleration (swerving) for cars, motorcycles, and commercial vehicles
- Forward & backward accelerations
- Driver responses to traffic signals, deceleration choices, reaction time & probability of stopping
- More!

COURSE INSTRUCTOR

Jeff Muttart, M.S., Ph.D., *is an internationally respected researcher in driver behavior and a recipient of the National Transportation Safety Board Award for Contributions to Safety and the Wallace Award for Excellence in Research. He is the author of more than 50 peer-reviewed articles on traffic safety and driver response in crash and near-crash events. A frequent conference speaker, he was the keynote speaker at WREX16.*

ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

INJURY BIOMECHANICS & TRAFFIC CRASH RECONSTRUCTION

COURSE FORMAT

- On-ground (24 hours / 3 days)

PREREQUISITES

None

Explore the physical and physiologic responses to force. This captivating course offers an in-depth examination of injury biomechanics for investigators, reconstructionists, attorneys, and other professionals. Each topic discusses mechanism and method of injury, analysis, and tolerances. The thorough curriculum includes vehicle-vs.-vehicle and vehicle-vs.-pedestrian collisions, the injury investigation, and advanced procedures for matching injuries to vehicle crashes. To further examine injury patterns, case studies are paired with lecture material specific to vehicle-vs.-vehicle crashes (front, side, and rear) and pedestrian-vs.-vehicle collisions.

CONTENT

- Automotive safety systems
- Mechanism of injury
- Methods, analyses & tolerances of injuries
- Upper & lower extremity biomechanics
- Vehicle-vs.-vehicle & vehicle-vs.-pedestrian impacts

COURSE INSTRUCTOR

Dr. Sean Shimada *earned a Ph.D. from the School of Health and Rehabilitation Sciences, University of Pittsburgh, in 1998, and a second master's degree in Bioengineering from the university in 2000. Both degrees were in the field of biomechanics. Currently he is the President of Biomechanical Consultants, a forensic biomechanics and engineering firm. His primary area of consulting and research is focused on identifying, determining the likelihood, and preventing brain and spinal cord injuries. Dr. Shimada has authored over 70 peer-reviewed journal articles, conference proceedings, and abstracts in the field of biomechanics, medicine, and engineering. He has conducted several research studies and presented at such meetings and conferences as the Association for the Advancement of Automotive Medicine, International Society of Biomechanics, American Society of Biomechanics, and Biomedical Engineering Society.*

ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

HEAVY VEHICLE CRASH RECONSTRUCTION

COURSE FORMAT

- On-ground (40 hours / 5 days)

PREREQUISITES

Traffic Crash Reconstruction 1 & 2

This specialized reconstruction class exams the critical and unique elements of reconstructing collisions involving heavy vehicles. Through lecture, field work, and case studies, this advanced course expands students' knowledge of heavy vehicle braking systems and behavior, including momentum and damage. The curriculum covers specific yet complex component issues that can be present in reconstructions involving these vehicles. Other course topics include rollovers, speed analysis techniques, and heavy vehicle EDRs. During multiple hours of field testing, students view demonstrations of various vehicle behaviors, examine braking and acceleration characteristics, and have the opportunity to practice analyzing and applying their collected data to reconstructions. Case

CONTENT

- Field testing
- Braking & special components
- Off-tracking & rollovers
- Basic heavy vehicle EDRs
- Proper data collection
- Speed analysis
- Crash behavior, momentum & damage
- Computer analysis
- Heavy vehicle tire stamping

ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

MOTORCYCLE TRAFFIC CRASH RECONSTRUCTION

COURSE FORMAT

- On-ground (32 hours / 4 days)

PREREQUISITES

Traffic Crash Reconstruction 1 & 2

In 2021, motorcycle operators accounted for 14% of all traffic fatalities, according to the NHTSA, which also reports that this is the highest number of motorcycle driver fatalities since 1975. This hands-on course teaches the skills required for advanced investigation of these often devastating crashes.

Course participants develop a firm understanding of motorcycle crash causation, inspection, and dynamics and examine the unique characteristics and challenges that arise in collisions involving motorcycles and their operators. A dive into kinematics includes conversions and derivations of basic equations, and curriculum also covers simulation analyses for impact speed, Monte Carlo Analysis for speed ranges, and more.

Participants benefit from a combination of in-class lecture and practical lessons using real motorcycles and sample evidence.

CONTENT

- Labs with real motorcycles & sample evidence
- Rider performance & perception-response time
- Braking systems
- Acceleration behavior, calculations & gearing analysis
- Analysis of wheelbase reduction for determination of impact speed
- Sliding friction & angular momentum
- Rider & pillion vault analysis
- Event data recorders & dataloggers

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ACTAR-Accredited Professionals Earn 32 ACTAR CEUs

PEDESTRIAN & BICYCLE CRASH RECONSTRUCTION

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
Traffic Crash Reconstruction 1; Reconstruction 2 is encouraged

CONTENT
- Identifying & documenting information from the road, vehicle & body
- Investigating pedestrian & bicycle hit-and-run crashes
- Pedestrian motion as a result of a vehicle collision
- Pedestrian & bicycle crash reconstruction techniques
- Vehicle speed estimates
- Vehicle dynamics review
- Time-distance analysis
- Pedestrian / bicycle strategy & tactics
- Pedestrian visibility
- Lab / Field projects
- Case analysis / case studies

ACTAR-Accredited Professionals Earn 40 ACTAR CEUs

Vehicle-vs.-pedestrian and vehicle-vs.-bicycle collisions often result in severe injuries to the pedestrian or bicyclist, escalating the importance of investigating and reconstructing these crashes. In this specialized course, students learn the mathematical equations for modelling such collisions and the appropriate formulas for varied crash scenarios.

Participants obtain the skills to determine first-contact positions of pedestrians, bicycles, and vehicles and to estimate the speed of a striking vehicle. Other course topics include human body motion as a result of an impact, empirical data for pedestrian walking and running, and bicycle collisions. Students also receive an introduction to injury biomechanics.

This course includes three valuable lab workshops. An outdoor, nighttime pedestrian visibility workshop exposes students to the different effects of illumination, luminance, and glare. Participants learn to discern the roles that visual acuity and contrast sensitivity play in the driving process. Other lab projects include developing data from pedestrian and bicycle velocities and studying drag factors of bodies on various surfaces.

After completing this course, students are able to:
- Determine first contact positions;
- Estimate the speed of a striking vehicle;
- Use appropriate equations to calculate vehicle speeds based on pedestrian, bicycle, and vehicle configurations;
- Understand human body motion as a result of an impact;
- Develop and use empirical data for pedestrian walking and running; and,
- Understand the bicycle collision.

CRASH INVESTIGATION & RECONSTRUCTION
Elective Courses

USING EXCEL IN COLLISION INVESTIGATION

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
Traffic Crash Reconstruction 1 & 2

Learn the valuable ability to use Microsoft Excel in crash investigation and reconstruction. Our course sets itself apart from general Excel courses with its focus on crash investigation and reconstruction rather than a general business environment.

In this hands-on class, students work in Excel the entire week, creating all of the spreadsheets they use in class. The week begins with basic Excel operations. By the end of the week, students will be able to complete such advanced Excel functions as writing macros, working complex "if" statements, creating form controls, and using goal seeker and solver.

CONTENT
- Basic & advanced spreadsheet operations
- Trigonometric functions
- Formatting cells & numbers
- Conditional formatting
- Naming cells & constants
- Working with names in functions
- Writing complex equations
- Using form controls
- Working with data validation
- Conditional / logical functions ("If" statements)
- Database operations
- Using goal seeker & solver

TRAFFIC CRASH RECONSTRUCTION UPDATE & REFRESHER

COURSE FORMAT
- On-ground (40 hours / 5 days)
- New! Blended Learning

PREREQUISITES
Traffic Crash Reconstruction 1 & 2

Designed for those who completed Traffic Crash Reconstruction 1 & 2 more than three years ago, this course updates participants on industry advances and utilizes real-world case studies to refresh students' skills in the areas taught in Reconstruction 1 and 2.

CONTENT
- Engineering mechanics
- Collinear momentum
- Oblique momentum
- After-impact drag factors
- Work & energy
- Damage energy
- Energy & momentum
- Force balance

New! Blended Learning Format!
Students who enroll in the **five-week Blended Learning section** will receive full access to video recordings of each live course. Weekly assignments and case studies provide opportunities for individualized instructor feedback.

Whether you take the on-ground or Blended Learning format, this course is a comprehensive tool for rebuilding confidence, updating technical skills, and earning 40 ACTAR CEUs. *Learn more about Blended Learning on page 10.*

TRAFFIC RADAR / LIDAR INSTRUCTOR TRAINING

COURSE FORMAT
- On-ground (40 hours / 5 days)

PREREQUISITES
1 year RADAR / LIDAR experience

In this train-the-trainer course, students learn how to develop a RADAR / LIDAR operator course and how to instruct new operators in their agencies. In addition to instructional methodology and the technical and legal aspects of RADAR / LIDAR operation, this **NHTSA-approved course** also covers the latest information, content, and materials needed to successfully train new operators and features **practical field exercises** using the latest equipment. Material is provided in PowerPoint, including the course administrator manual, teaching outlines, and the student-operator manual.

CONTENT
- Instructional methodology
- LIDAR vs. RADAR technology
- Practical field demonstrations & exercises
- Field training & operator certification
- Speed & enforcement
- Stationary RADAR operation
- Moving RADAR / LIDAR operation
- Effects of RADAR & LIDAR
- Visual speed & range determination
- Legal aspects of speed measurement
- Administrative guides for speed enforcement

ACTAR-Accredited Professionals
EARN 40 ACTAR CEUs in TCR Update & Refresher ***or*** Using Excel in Collision Investigation

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CRASH INVESTIGATION & RECONSTRUCTION
sUAS Electives

sUAS FAA KNOWLEDGE TEST PREPARATION

CONTENT

- sUAS characteristics stipulated in Part 107
- Exclusions from Part 107
- Operational requirements & limits
- Supporting crew roles, management & best practices
- The National Airspace System
- Characteristics of flight
- Aeronautical decision making
- Physiological factors for pilots
- Safe-loading restrictions & procedures
- Evaluating operation performance
- Effects of weather

COURSE FORMAT

- On-ground (8 hours / 1 day)

PREREQUISITES

None

Get ready for your FAA sUAS Knowledge Test! When paired with adequate studying, students will be prepared both to take and pass the FAA test and also begin safely operating drones within the U.S. National Airspace System. Curriculum includes: requirements for obtaining a remote pilot certificate with a small sUAS rating; required sUAS registration, markings, and condition; maintenance; inspection criteria to verify a sUAS is in safe operating condition; and, reporting accidents resulting from sUAS operations. Instructors also cover abnormal and emergency situations that may rise during a sUAS operation.

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sUAS CRASH INVESTIGATION REMOTE PILOT

CONTENT

- sUAS setup & configuration
- sUAS maintenance
- Camera setup & configuration
- Camera controls
- Preflight checks
- Flight planning & patterns
- Day & nighttime image capturing
- Terrestrial photography techniques for photogrammetry
- Field measurements
- Obstacle navigation techniques

ACTAR-Accredited Professionals Earn 8 ACTAR CEUs

COURSE FORMAT

- On-ground (8 hours / 1 day)

PREREQUISITES

sUAS FAA Knowledge Test Prep; or, a current 14 CFR Part 107 Certification

Developed for the unique needs of law enforcement! Pilots employed at a public safety agency learn how to reliably capture photo and video evidence at a crash scene. Our experienced instructors work with students using DJI Inspire / 1 sUAS drones to teach essential skills that are essential for successful drone pilots.

Our course also covers such issues as handling trees, powerlines, wind, snow, and other obstructive conditions and incorporates a demonstration of common capture errors. Students also participate in an overview of 3D-model construction and a mock crash scene.

CRASH INVESTIGATION & RECONSTRUCTION
sUAS Electives

CRASH INVESTIGATION & RECONSTRUCTION AERIAL PHOTOGRAMMETRIST

COURSE FORMAT
- On-ground (16 hours / 2 days)

PREREQUISITES
Strong computer skills

Students utilize the Pix4DMapper photogrammetry modeling software to learn how to develop 3D models and orthomosaics from evidence captured with aerial and ground photography. This exciting course covers such important skills as geographic projections and geo-referencing, generating sparse and dense-point clouds and textured meshes, selecting and using manual tie points, generating x-y-z point lists, correcting common problems, and more.

CONTENT
- Structure from Motion concepts
- EXIF data
- Geographic projections & geo-referencing
- Sparse & dense point clouds
- Creating textured meshes
- Manual tie points
- Converting to local coordinate systems
- Generating X,Y,Z point lists
- Common problems
- Exporting to CAD software

New! ADVANCED CRASH INVESTIGATION & RECONSTRUCTION AERIAL PHOTOGRAMMETRIST

COURSE FORMAT
- On-ground (8 hours / 1 day)

PREREQUISITES
1 year experience processing crashes with Pix4Mapper

This advanced photogrammetry course is a one-day program in which experienced photogrammetrists who utilize Pix4D Mapper can further their skills with advanced topic discussions addressing common pitfalls and issues. Students will learn advanced processing techniques and use new skills to complete challenging, real-world projects.

CONTENT
- Updated photogrammetry techniques
- Troubleshooting issues with scene captures
- Advanced use of Pix4D software
- Documenting vehicle damage with drone data
- Advanced diagramming procedures

Find a CDR! or
Scan or Visit
nucps.northwestern.edu/crash

POLICE MOTORCYCLE INSTRUCTOR TRAINING

REQUIREMENTS

Our Police Motorcycle courses require a valid, unrestricted motorcycle endorsement from student's state of residence (temporary/provisional permits are not accepted).

CONTENT

- Principles of adult learning
- Methods of instruction
- Site selection & course layout
- Teaching field exercises
- Street-riding techniques
- Law enforcement tactical techniques
- Students bring their own bikes.

POLICE MOTORCYCLE INSTRUCTOR TRAINING

By demonstrating an ability to conduct high-caliber training, NUCPS-certified instructors provide their agencies with reduced risk and improved safety. Our three-week course prepares participants to teach the 80-hour NUCPS Police Motorcycle Operator Training™ course to officers in their own agency. Upon successful completion, candidates will receive their Northwestern Police Motorcycle Instructor certification, which is valid for three years and permits them to teach our copyrighted curriculum to their own agency members.

Week One familiarizes students with course set up and basic exercises, reviews adult education methods, and provides opportunities for feedback on technique. To continue in the program, candidates must pass the Week One exam. Weeks Two and Three are integrated with an operator training course and give instructor candidates a supervised, hands-on teaching experience.

COURSE FORMATS

- On-Ground
- Remote (2 hours, synchronous)

CONTENT

- Students ride their own bikes
- Registrants receive a copy of the most recent *Northwestern Center for Public Safety Motorcycle Instructor Manual* to prepare for their exams
- Recertification involves a riding-skills exam and an instructing-skills exam.

POLICE MOTORCYCLE INSTRUCTOR RECERTIFICATION

Recertification ensures all instructors maintain the superior knowledge, skills, and teaching methods expected of NUCPS-certified police motorcycle instructors. NUCPS-certified instructors can renew their expiring or recently expired three-year certificates at **a one-day, on-ground program or through a two-hour virtual program.** Both formats involve a test of riding and teaching abilities. Upon successful completion, participants receive a new three-year instructor certificate, which authorizes them to continue training police motorcycle operator students at their agencies using our copyrighted training curriculum.

Learn More!
nucps.northwestern.edu/motorcycle

Celebrating STUDENT ACHIEVEMENTS & MILESTONES

NUCPS EXECUTIVE LEADERSHIP AWARD

This prestigious honor is awarded annually to qualified applicants who have successfully completed all three of our core management courses: Supervision of Police Personnel, School of Police Staff & Command, and the Executive Management Program. **Visit nucps.northwestern.edu/management** for more information and to download an application.

FRICKE COOPER ACHIEVEMENT AWARD

Qualified Crash Investigation & Reconstruction students who have successfully completed the required nine courses (the Crash Series, CDR Analysis & Applications, and three elective courses in Crash Investigation & Reconstruction) are invited to apply for this elite annual award. Visit **nucps.northwestern.edu/crash** for more information and to download an application. Applications for the 2025 award are due by March 1, 2026.

Recipients of both the NUCPS Executive Leadership Award and the Fricke Cooper Achievement Award are honored for their achievements at an luncheon each year. (Students are not required to attend the luncheon to receive their achievement awards.)

NUCPS E-MAIL SIGNATURE LOGO PROGRAM

This program recognizes the achievements of graduates of the School of Police Staff & Command and of our Crash Investigation Core Sequence with custom email signature logos.

School of Police Staff & Command Logo
E-mail signature logos are available to those who have successfully completed the on-ground or online SPSC program. Each logo is customized with the graduate's class number. Visit **nucps.northwestern.edu/management** to download a request form.

Traffic Crash Reconstruction Professional Logo
To qualify, students must have successfully completed Crash Investigation 1, Crash Investigation 2, Vehicle Dynamics, Traffic Crash Reconstruction 1, and Traffic Crash Reconstruction 2. Each e-mail signature logo is customized with the year applicants completed TCR2. Visit **nucps.northwestern.edu/crash** to download an application.

Learn More!
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