This course will teach you how to use the iWitness™ close-range photogrammetry software for 2D (two-dimension) and 3D (three-dimension) modeling with emphasis on crash scene diagramming and vehicle crush measurements from digital images.

You will be introduced to close-range photogrammetry theory, planar rectification (2D measurement from a single image using XYRectify), camera use for scene imaging and photogrammetric data reduction of digital images from consumer grade digital cameras. From there we will explore the functionality of the iWitness™ software such as the facet-form polyline tool, pointing editing, edit/review, working with multiple project networks, point offsetting, project unit scaling, 3D model rotation, axis inclination and network stitching. You will also learn how to integrate photogrammetric data with other metrology devices such as total stations.

We will teach you how to metrically calibrate your digital SLR camera in iWitness™. We will show you the required tasks of the photogrammetric computer analytics from importing the digital images through final DXF export of a 2D and 3D network for use in CAD.

You will be required to participate in field exercises using an outdoor staged scene and must be familiar with the operation of a PC. A background in 3D scene measurements from other measurement devices, as well as experience with CAD diagramming software, will be helpful. Although not required, you are encouraged to bring your own entry-level, prosumer, or digital SLR camera for camera calibration and practice use. The digital camera must be equipped with the ability of manual focus and you must understand your camera’s settings.

**Topics include:**
- Theory of close-range photogrammetry and image rectification
- Overview of the iWitness™ software
- Camera calibration
- Field imaging
- Image importing and exporting
- 3D crush modeling exemplar/crush profiling
- 3D transformation to control, import projects for linking and axis inclination
- Working with digital images from other cameras
- Image rectification (2D planar measurements from a single image)
- Automatic measurement using iWitnessPRO™

**Notes:** For those that pass the examination, and are ACTAR certified, the course is eligible for 30 CEUs. Graduates of this course are eligible for discount pricing from the software company. Please see your instructor for details.

**Audience:** Law enforcement and private traffic crash investigators, claims adjusters, engineers, attorneys, safety officers, military investigative personnel, animators and graphic designers

---

This iWitness™ - Close-Range Photogrammetry course is eligible for 40 ACTAR CEUs.

This class is available as a contract course only. Please call us at 904-620-4786 for details.