

## VDOT CADD Support Training Schedule

| Classes                                     | Dates     | Days | Locations      | Instructors   | Addresses                                       |
|---|-----------|------|----------------|---------------|---|
| OpenRoads Technology                        | Oct 8-11  | 4    | Central Office | Keith Boteler | 1401 East Broad Street Richmond, Virginia 23219 |
| MicroStation Basics                         | Nov 12-13 | 2    | Lynchburg      | Dave Mayer    | Campbell Ave, Lynchburg, VA 24501               |
| Subsurface Utilities Drainage Design (SUDA) | Jan 28-30 | 3    | Central Office | Beebe Ray     | 1401 East Broad Street Richmond, Virginia 23219 |
| Utility Engineering Training (SUDA)         | Jan 31    | 1    | Central Office | Beebe Ray     | 1401 East Broad Street Richmond, Virginia 23219 |
| MicroStation Basics                         | Feb 11-12 | 2    | Staunton       | Steve Rick    | 811 Commerce Rd, Staunton, VA 24401             |
| OpenRoads Technology                        | Feb 24-27 | 4    | Central Office | Jimmie Prow   | 1401 East Broad Street Richmond, Virginia 23219 |

### OpenRoads Technology (4 days)

The course provides training for the following items related to OpenRoads.

Skills Taught:

- o Introduction to Terrain
- o Civil Geometry
- o Vertical Alignment
- o Corridor Geometry Generation
- o Creating Templates
- o Corridor Modeling Overview
- o SuperElevation
- o Designing with Corridor Modeling
- o Cross Sections and Labeling
- o Earthwork
- o Civil Cells
- o DTM
- o Horizontal Alignment
- o Corridor Modeling Overlay/Widening
- o Roadway Designer-Intersection Design

### Subsurface Utilities Drainage Design (SUDA 3 days)

You will learn to perform the following in the 3D CAD environment of OpenRoads.

Skills Taught:

- Select Storm Events
- Analyze Terrain
- Lay Out Inlets, Pipes, Culverts, and Above/Underground Utilities
- Delineate and Define Catchments
- Perform a System Analysis
- Perform a System Design
- Manage varying Design Scenarios
- Generate Reports (including standard VDOT forms)
- Generate Profiles
- Detect Conflicts with Utilities and other 3D features
- Create 3D utilities from 2D survey graphics

### MicroStation Basics (2 days)

The MicroStation Basics Full class is designed for the new MicroStation user and builds a solid foundation in the concepts, tools and features found in the MicroStation drawing environment. Starting with setting up a drawing and concluding with plotting, students walk through typical workflows using the tools and features in MicroStation.

Skills Taught:

- Using General Tools
- Defining Element Attributes
- Controlling the Display of Designs
- Using AccuDraw and AccuSnap
- Creating Drawing Elements
- Selecting Elements
- Manipulating Elements
- Modifying Elements
- Working with Cells
- Annotating Designs
- Composing Designs and Drawings
- Printing and Publishing

### Utility Engineering Training (SUDA 1 day)

Skills taught:

- Learn to evaluate a file containing utilities, including 3D position and data attributes.
- Learn to generate reports, conduct queries and generate profiles.
- Learn to create utilities from 2D and 3D survey graphics
- Learn how to lay out proposed utilities, including underground - lines and at-grade appurtenances, such as water valves and fire hydrants.