

**Course:****INROADS SELECTCAD V8 - INTERMEDIATE TO ADVANCED COURSE****Course Description:**

This 3 day course is designed for Civil Engineers and Designers who want to learn how to apply advanced techniques of road design, site design, and COGO layout commands to a project using InRoads SelectCAD v8. This course will focus on the migrating from v7 to version v8. We use preferences and data sets focusing on DOT standards, similar to those in which the students may encounter in everyday work environment. We use actual data sets similar to those in which the students may encounter in everyday work environment. After completion of this course a student will have working knowledge to design a site or highway using InRoads SelectCAD. They will have knowledge of productive techniques to develop CAD plans, profiles and cross sections showing the design. Be able to create a Digital Terrain Model (DTM) of the proposed surface features, and evaluate the DTM using triangles, contours and volumes. Students are encouraged to bring project examples, data sets and questions to the course for open discussion.

**Prerequisites:**

Students should have experience in highway and/or site design; understand fundamentals of geometry and Digital Terrain Models. At least 6 months experience with InRoads is recommended. Also working knowledge of MicroStation SE or J is recommended.

**Date:** Contact us for details or see schedule on our site.

**Location:** Contact us for details.

**Enrollment Cost:** Contact us for details.

**Contact:**

To enroll, please call 315-831-8175 or send email to [Training@LeeGreen.com](mailto:Training@LeeGreen.com). This class does have a limit of 15 students. If you have any questions about this class, or if you would like to schedule an on-site class, please call or email.

**Course Topics include:**

- ❑ 1) SelectCAD configuration
  - Open from Start menu
  - Open from an icon
  - Open from an MDL after loading Microstation
  - Project Defaults paths
  - Tool options
    - Symbology Manager
    - Preference Manager
    - Feature Style Manager
    - Locks
- ❑ 2) Getting accustomed to the new user interface
  - Working with SelectCAD explorer
  - Multi-user settings
  - Customized tool bars
  - Macros and Functions keys
- ❑ 3) Surfaces
  - Digital Terrain Model (DTM)
  - importing from Survey SelectCAD
  - import from ASCII
  - import from Graphics
  - triangulating
  - Features
  - Why you want to use them?
  - Feature styles
  - Creating and editing features
- ❑ 4) Geometry
  - Horizontal Alignments
  - Horizontal elements (fixed, float, # free)
  - Traverse Edit
  - Multi-centered curves
  - Cul-de-sac
  - Linear Regression analysis
  - Lot Layout
  - Intersections
  - Cogo Points
  - Vertical Alignments
  - Vertical Elements
- ❑ 5) Highway Design
  - Super Elevations
  - Templates
  - Advanced Decision Tables
  - Transition Control
  - Roadway definition and design
  - Plan and Profile Generator
  - Volumes and reports
- ❑ 6) Site Design and/or Corridor Modeling (completing the design surface)
  - Drape Surface
  - Generate longitudinal features
  - Generate sloped surface
  - Isopach
  - Apply Decision table along a feature
  - Volumes and Reports
- ❑ 7) Visualization
  - Colored triangles
  - Rendering with global lighting
  - Aerial photo draping
  - VRML and QuickVision
  - Animations