

**Course:****INROADS V8.2 - INTERMEDIATE TO ADVANCED COURSE****Course Description:**

This 3 day course is designed for Civil/Highway Engineers and Designers, with prior experience in InRoads, who want to learn to apply advanced techniques of road design, site design, and COGO layout commands to a project using InRoads SelectCAD v8.2. This course will be customized to the users level of experience. We can 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:** \$950 per student or \$1000 per day at your location.

**Contact:**

To enroll, please call **315-831-8175** or send email to **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**
  - Setting up Menu bars in Microstation
  - Open InRoads from an MDL
  - Setting Project Defaults paths for quick & easy file access
  - Customizing Tool Bars
  - Creating Symbology and Feature Styles
  - Setting Macros and Functions keys
- ❑ **2) Surfaces**
  - Digital Terrain Model (DTM)
  - Importing from Survey
  - Transferring TINS from LDD, Eagle Point and Geopak
  - Mass imports of features from Graphics
  - Editing existing DTM's
  - Creating proposed DTM's
- ❑ **3) Geometry**
  - Horizontal Alignments
  - Horizontal elements (fixed, float, & free)
  - Traverse Edit
  - Multi-centered curves
  - Cul-de-sac
  - Horizontal and Vertical Alignment Linear Regression analysis
  - Lot Layout and Right-of-Way Takes
  - Intersections
  - Cogo Points
  - Vertical Alignments
  - Vertical Elements
- ❑ **4) Highway Design**
  - Super Elevations
  - Templates
  - Advanced Decision Tables
  - Transition Control
  - Roadway definition and design
  - Plan and Profile Generator
  - Volumes and reports
- ❑ **5) 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
- ❑ **6) Visualization**
  - Colored triangles
  - Rendering with global lighting
  - Aerial photo draping
  - VRML and QuickVision
  - Animations