



# Advance Road Design & Analysis using MXROAD

**Course Curriculum (Duration: 50 Hrs.)** 

## Chapter 1: Introduction to OpenRoads

- OpenRoads Technology
- Software Tools
- Fundamental enhancements and changes within OpenRoads
- Getting Started with MXROAD
- Utilizing the Proper Workspace
- Navigating the User Interface
- Select Workspace and Set Up a Project File

#### **Chapter 2: Creating & Viewing Terrain**

- Creating, attaching, and displaying an Existing Ground Terrain Model
- Updating, Editing, and Analyzing Terrain Models
- Attach a Raster Aerial Photograph

#### **Chapter 3: Creating Geometry**

- Creating Horizontal / Vertical Geometry from Elements
  - o Create horizontal / vertical geometry using line and arc element tools
  - o Use the OpenRoads Technology heads-up display and element manipulators
  - o Define start station of the alignment
- Creating Horizontal / Vertical Geometry from Pl's
- Workshops

## **Chapter 4: Cross Sections**

- Creating and Viewing Cross Sections
- Annotating Cross Sections
- End Area Volumes
- End Area Volumes with Substrata
- Workshops

#### Chapter 5: Overlay, Stripping, and Widening

- Creating Overlay, Stripping or Milling Template
- Creating a Multi-Layer Overlay Template
- Evaluating the Cost of a Corridor
- Creating a Widening Template
- Vertical Adjustments

## **Chapter 6: Creating Civil Cells**

- About Civil Cells
- Create a Simple 2D Intersection Civil Cell
- Complete the Simple 2D Intersection Civil Cell

www.ifsacademy.org

• Create a Simple 3D Intersection Civil Cell



# **Chapter 7: Case Study / Project**

\*\*\*\*\*\*\*

IFS Academy, Pune

Phone: +91-20-6400 7296, Email: training@ifsacademy.org, Visit Us At: www.ifsacademy.org