

## **B. Civil Design - 7 Hrs.**

### **1. Using Alignment and Setting**

- Defining alignment form Object
- Defining alignment form Polyline
- Station Display Format
- Creating Offset of the alignment
- Station Label setting
- Creating Station Label
- Station Offset Label
- Creating Points along an Alignment
- Working With more alignments

### **2. Line/Curves for Civil Design from L.D.**

- Curve between two lines
- Curve on two lines
- Curve Through a Point

### **3. Creating Profile From Surface and File data**

- Profile Sample Setting
- Profile Station Increments
- Sampling Profile Form Surface
- Sampling Profile From File
- Setting Horizontal and Vertical Scale
- Creating Full Profile
- Finding Elevation/Offset in Plotted Profile
- Working with more Profiles

### **4. Creating Cross-Section From Surface & file data**

- Sampling Cross-Section Form Surface
- Sampling Cross-Section From File
- Setting Horizontal and Vertical Scale
- Section Plot Layout Setting

- Section Page Layout Setting
- Plotting Cross-Section in Pages

#### **5. Designing Finish Ground Profile Level**

- Setting the current working Profile
- Creating Design level centerline
- Defining Created Design level centerline
- Applying the Designed level elevation and slope (%) on the working Profile

#### **6. Designing Cross-Section and Importing**

- Drawing the Cross-Section as per design
- Defining Cross-Section Template Drawing
- Importing The defined Template in to the required Cross-Section
- Plotting Cross-Section with Cross-Section Template in Pages
- Calculating Total Section Volume
- Section Volume output in Drawing and file
- Creating Mass Haul Diagram

#### **7. Plotting**

- Plotting Introduction
- Plot scale
- Plotting in required scale