

## ***Course Identification***

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Course Number: IHT-SF301/ OST-SF301  
Course Name: SITEOPS Certification  
Class Times: 3 Days: 8:30AM – 4:30 PM

## ***Course Description/Overview***

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The SITEOPS Certification course is designed for AEC professionals, introducing Parametric Design and Artificial Intelligence to Land Development. Participants will receive “hands-on” training in applying architectural and engineering principles, developing their ability to rapidly create and analyze multiple site designs with comprehensive budgets and associated 3D models. To earn certification, participants must complete a comprehensive, three-day (20 hour) training session conducted by a BLUERIDGE Analytics Certified Instructor.

## ***Course Learning Objectives***

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Upon the completion of the SITEOPS Certification course, participants will be able to:

- Rapidly create and analyze multiple design options with optimized cost reports
- Apply green building principles by designating tree saves and easements
- Create parking areas with directions and parking designations to maximize layout
- Generate earth take offs with material-specific shrink/swell factors
- Apply value engineering principles throughout the design process
- Apply grading principles and constraints to site designs
- Create existing and proposed surfaces
- Create a conceptual storm water management and storm water piping plan
- Create custom costing
- Create 3D models
- Import and export project data

## ***Course Schedule***

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### **Day 1 - AM Session**

#### **Introduction**

- Welcome and Introductions
- Course Syllabus Review
- Understanding How to Use SITEOPS

#### **Unit 1 – Introduction to SITEOPS**

- Login Into SITEOPS
- General Navigation – Web Pages
- Help & Assistance
- SITEOPS User Forum
- Create a Project
- Project Security and Collaboration

## **Unit 2 – SITEOPS Basics**

- Introduction to Basemap Editor
- Layer Manager
- SITEOPS Objects
- Mouse Navigation
- Selection and Snaps
- Drawing Objects
- CAD Functionality

### **Day 1 - PM Session**

## **Unit 3 – SITEOPS Layout**

- Starting a Project
- Underlay
- Spatial Templates
- Object Design Settings
  - Parking
  - Drive Paths
  - Easements
  - Buildings
  - Outparcels
- Intersection Drive Paths
- Exporting
  - DWG
  - PDF
  - LandXML
- Custom Layers
- Custom Objects

## **Unit 4 – Swept Path Analysis**

- Drawing Path
- Applying Vehicle
- Creating Vehicles Parts
- Vehicle Simulation
- Vehicle Points

### **Day 2 - AM Session**

## **Unit 5 – Grading & Stormwater**

- Default Properties
  - Constraints
  - Unit Cost
- Templates (Constraint and Cost)
- Importing Data

- DWG
- Grading
  - Simulator
  - Settings
  - Constraint Areas
  - Borrow/Fill Areas
- Geotech
  - Rock
  - Unsuitable

### **Day 2 - PM Session**

#### **Unit 6 – Grading & Stormwater Continued**

- Link Heights
  - Truck Docks
  - Retaining Walls
- Stormwater
  - Simulator
  - Roof Drainage
  - Tie-ins
  - Ponds
- Optimization
- Solution and Cost Review

### **Day 3 - AM Session**

#### **Unit 7 – 3D Visualization and Advanced Budgeting**

- Blocks
  - 2D
  - 3D
- Miscellaneous Cost

#### **Unit 8 – Troubleshooting**

- Grading Feasibility Issues
  - Slopes
  - Link Heights
  - Z-Values
- Piping Feasibility Issues
  - Pipe Cover
  - Flow

### **Day 3 - PM Session**

#### **Unit 9 – User-Specific Project**

#### **Conclusion**