

GEOVIA Surpac™ Surface Survey Tools (5 days)



The GEOVIA Surpac™ Surface Survey course is a five-day course designed for beginners and existing users of Surpac. It focuses on Survey concepts and processes within the software. The course provides users with an understanding of modeling methods that can be applied by Surveyors in their everyday work.

COURSE PREREQUISITES

- Understanding of basic Surpac concepts and functionality (the Surpac Foundation course)
- Knowledge of ASCII format files and Microsoft® Excel®
- Knowledge of Survey methods
- Basic knowledge of the Windows operating system and environment is necessary as the Surpac menu structure and graphical user interface (GUI) is similar to most Windows-based packages

EXPECTED OUTCOMES

Upon completion of this course, users will:

- Create Surfaces
- Create simple plots
- Validate Surfaces
- Intersecting Surfaces
- Volume calculations
- Importing Point Cloud Data for Surface creation
- Survey plotting of title Blocks

If a desired expected outcome is not listed above please contact GEOVIA Training for a detailed list of course deliverables and to discuss tailored training

COURSE STRUCTURE FLOW

Concepts	Topics
Overview	Overview of Survey Terminology used by Surpac create and edit function tool
	Importing Survey data
Surface	DTM surface concepts and rules
	Data preparation
	Creating surfaces
	Operations with surfaces (clip or intersect; DTM file functions)
	Simple Contouring tools
	Image draping
Base surface design tools	Volume calculation
	Terrain plan digitization and CAD tools
Point cloud	Expand string tools; ramp creation
	Import different point cloud file extensions
	Looking at classification data for display purposes
	Create surfaces from point cloud data and point cloud data from surfaces
	Edit point cloud data
Block model	Displaying Block model
	Creating/applying Block model

	constraints
	Block model report
Database (optional)	Survey database (concepts, creating, importing, mapping, auditing)
	Displaying control points
	Stability monitoring
	Database reporting
	Extracting data
Plotting	Plotting concepts
	Title block, border and plot sheet setup
	Plotting entities and styles
	Creating plots for different data types
	Formatting plot files
Exam	Exam

Optional Assignment

We can extend the course by another one day on request, to include Surpac foundation overview or assignments and practice. We can also evaluate your performance on the assignment.

Our **3DEXPERIENCE®** platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE®** Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3DEXPERIENCE** platform and applications, our customers push the boundaries of innovation, learning and production. °Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit www.3ds.com

