

GEOVIA Surpac™ Underground Survey Tools (4 days)



The GEOVIA Surpac™ Underground Survey course is a four-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
Solids modeling	Volume calculation
	Creating solids
	Editing solids
	Solid validation
	Volume reports
Digitization (optionally)	Advanced solids modeling
	Terrain plan digitization
Point cloud	Planes digitization
	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
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.

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