

GEOVIA Surpac™ Underground Engineering Tools (5 days)



In this course we'll focus on applying Surpac CAD and automatic design tools to complete demanding design and reporting tasks in an underground mining environment. You'll learn how to efficiently complete design tasks and create detailed reports that will help you make informed decisions. It's a chance to expand your knowledge, improve your skills, and discover new ways to use Surpac to enhance your mining engineering work.

COURSE PREREQUISITES

- Understanding of basic Surpac concepts and functionality including:
 - Data display and management
 - String files
 - CAD tools
 - DTM surfaces
 - Block modeling
 - Plotting
 - Solids
- Knowledge of ASCII format files and Microsoft® Excel®
- Previous exposure to the underground mining industry
- Basic knowledge of the Windows operating system and environment is necessary as the Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages

EXPECTED OUTCOMES

Upon completion of this course, users will:

- Underground mine design of ramps, shafts, access drives, and related development.
- Block model viewing, applying constraints, and reporting.
- Stope design and planning.
- Underground drill (ring) design and charging.
- Stope reconciliations and planning adjustments based on as-built information.
- Creation, repair, and validation of solids.
- Designing in 3D and 2D sections.
- Increased CAD design proficiency.
- Plotting (autoplot and file based).

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	New functionality in Surpac
	Preparing data, import & export, and organizing data
Underground development design	Shafts, ramps, access drives, and related development centre-line design
	Creating drive outlines of mine design
	Using drive profiles and centerline to create solids of mine designs
	Edit development designs
Stope design	Create and edit Stope design project: <ul style="list-style-type: none"> Creating stope shapes from ore outline solid and/or block model; Intersections and outersections of development solids and stope solids.
	Stope slicer
	Reporting volumes, tons, and grades of stopes
Updating design with as-built information	Importing stope survey
	Solid repair, editing, and validation
	Updating and editing mine plans with new information

Underground drill ring design and charging	Create sections from solid
	Drill rig set-up and range
	Ring designs, charging, and reporting
Block model	Block model viewing and applying constraints
	Reporting on block model
Plotting	Autoplot
	File based plotting
Workflow automation	Create simple macros to automate repetitive tasks
Open session	Session for open discussion and Q&A

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