



## GEOVIA Surpac™ Stope Shape Optimizer (1 day)



In this workshop-style course, we'll focus on Stope optimization is critical for mine planning and design, significantly impacting a mine's profitability. GEOVIA Stope Optimizer is a powerful tool that optimizes the layout of stopes to identify the most profitable areas within a resource model while minimizing infrastructure costs. It generates stope designs for a variety of underground mining methods and the stopes can be directly imported into GEOVIA MineSched for underground scheduling.

### **COURSE PREREQUISITES**

- Understanding of basic Surpac concepts and functionality including:
  - o Data display and management
  - o String files
  - o CAD tools
  - o DTM surfaces
  - o Block modeling
  - o Plotting
  - o 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:

- Understand the optimization techniques used in Stope Shape Optimizer.
- Create stope shapes for various underground mining methods using a block model.
- Review SSO inputs and outputs to ensure their accuracy in optimization.
- Interpret and utilize the information generated by the Stope Optimizer, including 3D solids, section strings, and reports, for strategic and tactical mine planning.

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
	Explaining optimization techniques and data set processing
Stope Shape Optimizer	Create stope project with input parameters including:
	<ul><li>mining width;</li><li>wall dilutions;</li><li>wall angles;</li></ul>
	<ul><li>stope separation distances;</li><li>stope heights and widths.</li></ul>
	Define inputs and outputs data
	Create stopes from fixed levels and fixed sections
	Create stopes from fixed levels and variable sections
	Create stopes from variable levels and fixed sections
	Create stopes from variable levels and variable sections
	Create stopes from fixed sections and gradient strings levels
	Create stopes from variable sections and gradient strings levels
Open session	Session for open discussion and Q&A

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