

# **Course Catalog**

#### Learning Experience for GEOVIA 28 May 2024



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## Learning Experience For GEOVIA Surface Earth Design & Engineering -JPDECGE-OC

Pra	ctice Blast Design - Surpac
Course Code	GEO-en-GOBDS-F-GEOVIAR9
Available Release	GEOVIA Surpac 2023
Duration	3 hours
Course Material	
Level	Fundamental
Audience	Mine engineers
Description	This training will demonstrate how interact with the 3DEXPERIENCE platform from within Surpac.
Objectives	<ul> <li>This course is a review of Surpac Drill &amp; Blast functionality. It will guide you through the main aspects of blast design:</li> <li>Creating blast patterns</li> <li>Editing blast holes</li> <li>Using a blast hole database</li> <li>Charging &amp; sequencing</li> <li>Blast reporting</li> </ul>
Prerequisites	Completion of the Surpac Essentials Learning Modules.
Available Online	Yes

Practice (	Collaborative Designer for Surpac
Course Code	GEO-en-GOCDS-F-GEOVIAR9
Available Release	GEOVIA Surpac 2023
Duration	1 hours
Course Material	
Level	Fundamental
Audience	Geologists, Mine engineers
Description	This training will demonstrate how to interact with the 3DEXPERIENCE platform from within Surpac.
Objectives	<ul> <li>Upon completion of this learning module, you will be able to:</li> <li>Initialize &amp; configure the 3DEXPERIENCE control panel in Surpac</li> <li>Retrieve data from &amp; upload data to the 3DEXPERIENCE platform.</li> <li>Advance the workflow by passing your changes to the next person in line for approval.</li> <li>Identify tasks assigned to you for completion.</li> <li>Learn to create different revisions of data.</li> </ul>
Prerequisites	Completion of the "Practice Surpac Essentials" module
Available Online	Yes

P	Practice Open Pit - Surpac
Course Code	GEO-en-GOOPS-F-GEOVIAR9
Available Releases	GEOVIA Surpac 2021, GEOVIA Surpac 2023
Duration	6 hours
Course Material	
Level	Fundamental
Audience	
Description	This training will demonstrates how to create pit and dump designs using Surpac. During the course, the following subjects will be described: Using string tools to create a simple pit design, Preparing data for a basic pit design usage, Using pit design tools to create ramps, crests, toes, and berms, Creating switchbacks, Extending a pit design to a DTM surface, Calculating grade and tonnage of block model blocks within a pit design, Designing a waste dump.
Objectives	DTM Tools - Simple pit - Waste dump - Data preparation
Prerequisites	<ul> <li>Basic knowledge of Surpac: it is recommended that you understand the procedures and concepts from the Surpac Essentials course.</li> <li>GEOVIA Surpac licensed and installed on the computer</li> <li>The data set.</li> </ul>
Available Online	Yes

Pra	ctice Road Design - Surpac
Course Code	GEO-en-GORDS-F-GEOVIAR5
Available Release	GEOVIA Surpac 2021
Duration	6 hours
Course Material	
Level	Fundamental
Audience	
Description	This training shows the different road design functions of Surpac. Working through this tutorial you will gain the skills to create, use, and modify roads.
Objectives	Road design functions
Prerequisites	<ul> <li>Prerequisites:</li> <li>Basic knowledge of Surpac It is recommended that you understand the procedures and concepts from the Introduction tutorial.</li> <li>GEOVIA Surpac licensed</li> <li>The data provided during the training.</li> </ul>
Available Online	Yes

P	Practice Surpac Essentials
Course Code	GEO-en-GOSE-F-GEOVIAR7
Available Releases	GEOVIA Surpac 2021, GEOVIA Surpac 2022
Duration	12 hours
Course Material	
Level	Fundamental
Audience	
Description	This training is designed to help new users start using the software .
Objectives	<ul> <li>understand the powerfull of Surpac Software</li> <li>Interface description</li> <li>SURPAC concept</li> <li>Interface Concept</li> <li>General Concept</li> </ul>
Prerequisites	
Available Online	Yes

## Learning Experience For GEOVIA Underground Earth Design & Engineering - JMDECGE-OC

Practice Collaborative Designer for Surpac		
Course Code	GEO-en-GOCDS-F-GEOVIAR9	
Available Release	GEOVIA Surpac 2023	
Duration	1 hours	
Course Material		
Level	Fundamental	
Audience	Geologists, Mine engineers	
Description	This training will demonstrate how to interact with the 3DEXPERIENCE platform from within Surpac.	
Objectives	<ul> <li>Upon completion of this learning module, you will be able to:</li> <li>Initialize &amp; configure the 3DEXPERIENCE control panel in Surpac</li> <li>Retrieve data from &amp; upload data to the 3DEXPERIENCE platform.</li> <li>Advance the workflow by passing your changes to the next person in line for approval.</li> <li>Identify tasks assigned to you for completion.</li> <li>Learn to create different revisions of data.</li> </ul>	
Prerequisites	Completion of the "Practice Surpac Essentials" module	
Available Online	Yes	

Practice Surpac Essentials	
Course Code	GEO-en-GOSE-F-GEOVIAR7
Available Releases	GEOVIA Surpac 2021, GEOVIA Surpac 2022
Duration	12 hours
Course Material	
Level	Fundamental
Audience	
Description	This training is designed to help new users start using the software .
Objectives	<ul> <li>understand the powerfull of Surpac Software</li> <li>Interface description</li> <li>SURPAC concept</li> <li>Interface Concept</li> <li>General Concept</li> </ul>
Prerequisites	
Available Online	Yes

Practice L	Inderground Mine Design - Surpac
Course Code	GEO-en-GSUMD-F-GEOVIAR9
Available Releases	GEOVIA Surpac 2021 , GEOVIA Surpac 2022 , GEOVIA Surpac 2023
Duration	8 hours
Course Material	
Level	Fundamental
Audience	
Description	This training will demonstrates how to create underground mine designs using SURPAC stope design tools.
Objectives	<ul> <li>This training will cover the following subjects:</li> <li>Preparing data for a basic underground design</li> <li>Creating a simple stope design manually</li> <li>Editing and evaluating stopes</li> <li>Creating stopes automatically using Stope Slicer</li> <li>Creating optimized stope shapes</li> <li>Level design</li> <li>Ramp design</li> </ul>
Prerequisites	<ul> <li>Basic knowledge of Surpac: it is recommended that you understand the procedures and concepts from the Surpac Essentials course.</li> <li>GEOVIA Surpac licensed and installed on the computer.</li> </ul>
Available Online	Yes

### Learning Experience for GEOVIA Cave Planner PCBC - GBCCGE-OC

Practice PCBC Essentials	
Course Code	GEO-en-PCBC-F-GEOVIAR8
Available Release	GEOVIA GEMS 6.8
Duration	10 hours
Course Material	
Level	Fundamental
Audience	
Description	In this training, you will learn how to use PCBC in order to build, simulate, evaluate, execute, and calibrate a block caving project.
Objectives	<ul> <li>To understand the basic concepts of the GEOVIA GEMS™ PCBC software</li> <li>To understand the core workflow of block cave 3D modeling in GEOVIA GEMS™ PCBC</li> <li>To understand the core workflow of the mine planning in GEOVIA GEMS™ PCBC</li> <li>To analyze different mixing and material flow scenarios in block caving</li> <li>To execute different production scheduling scenarios using GEOVIA GEMS™ PCBC</li> <li>To achieve objectives of a block caving project while meeting the technical and production constraints</li> </ul>
Prerequisites	<ul> <li>Understanding of the Geology modeling, Block modeling, Mine Design, and Mine Planning concepts</li> <li>Understanding of the Block-Cave Mining Method</li> <li>Installed license for GEOVIA GEMS<sup>™</sup> PCBC</li> </ul>
Available Online	Yes

### Learning Experience for GEOVIA Cave Planner PCSLC - GLCCGE-OC

Practice PCSLC Essentials		
Course Code	GEO-en-PCSLC-F-GEOVIAR8	
Available Release	GEOVIA GEMS 6.8	
Duration	8 hours	
Course Material		
Level	Fundamental	
Audience		
Description	This training is the practical guide on the basic concepts and the core workflow of the SLC mine planning in GEOVIA GEMS™ PCSLC software.	
Objectives	<ul> <li>Create a project and import data</li> <li>Generate tunnels and rings, trim and calculate rings</li> <li>Learn about and setup Neighbors, mixing parameters and extraction percentage</li> <li>Set up a schedule</li> <li>Learn about mixing calculations</li> </ul>	
Prerequisites	<ul> <li>The understanding of the Geology modeling, Block modeling, Mine Design and Mine Planning concepts</li> <li>The understanding of the Sublevel Caving Mining Method</li> <li>Installed license GEOVIA GEMS<sup>™</sup> PCSLC</li> </ul>	
Available Online	Yes	

### Learning Experience for GEOVIA Earth Modeling - JGMCGE-OC

Practice Collaborative Designer for Surpac		
Course Code	GEO-en-GOCDS-F-GEOVIAR9	
Available Release	GEOVIA Surpac 2023	
Duration	1 hours	
Course Material		
Level	Fundamental	
Audience	Geologists, Mine engineers	
Description	This training will demonstrate how to interact with the 3DEXPERIENCE platform from within Surpac.	
Objectives	<ul> <li>Upon completion of this learning module, you will be able to:</li> <li>Initialize &amp; configure the 3DEXPERIENCE control panel in Surpac</li> <li>Retrieve data from &amp; upload data to the 3DEXPERIENCE platform.</li> <li>Advance the workflow by passing your changes to the next person in line for approval.</li> <li>Identify tasks assigned to you for completion.</li> <li>Learn to create different revisions of data.</li> </ul>	
Prerequisites	Completion of the "Practice Surpac Essentials" module	
Available Online	Yes	

Practice Geology Modelling - Surpac		
Course Code	GEO-ru-GOGMS-F-GEOVIAR5	
Available Release	GEOVIA Surpac 2021	
Duration	9 hours	
Course Material		
Level	Fundamental	
Audience		
Description	This training introduces the theory behind geological database processes and provides detailed examples using the geological database modelling functions in Surpac. Working through this tutorial you will gain the skills to create, use, and modify geological databases.	
Objectives	<ul> <li>creating database</li> <li>display drillholes</li> <li>drillholes and ploting section</li> <li>compositing</li> <li>domain</li> <li>Block Model fundamentals</li> </ul>	
Prerequisites	<ul> <li>Basic knowledge of Surpac It is recommended that you understand the procedures and concepts from the Introduction tutorial.</li> <li>GEOVIA Surpac licensed</li> <li>The data set.</li> </ul>	
Available Online	Yes	

Practice Resource estimation - Surpac		
Course Code	GEO-en-GORES-F-GEOVIAR5	
Available Release	GEOVIA Surpac 2021	
Duration	12 hours	
Course Material		
Level	Fundamental	
Audience		
Description	This training introduces the key concepts behind resource estimation processes and provides detailed examples using the drillhole database, block modelling and geostatistics functions in GEOVIA Surpac. Working through this tutorial you will gain the skills to create your own resource models.	
Objectives	Key concepts for resource estimation	
Prerequisites	<ul> <li>Prerequisites:</li> <li>Basic knowledge of Surpac. It is recommended that you understand the procedures and concepts from the GEOVIA Surpac - Essentials tutorial.</li> <li>Having been through the GEOVIA Surpac - Geology Modelling course.</li> <li>GEOVIA Surpac application installed and licensed.</li> <li>The dataset.</li> </ul>	
Available Online	Yes	

Practice Surpac Essentials	
Course Code	GEO-en-GOSE-F-GEOVIAR7
Available Releases	GEOVIA Surpac 2021, GEOVIA Surpac 2022
Duration	12 hours
Course Material	
Level	Fundamental
Audience	
Description	This training is designed to help new users start using the software .
Objectives	<ul> <li>understand the powerfull of Surpac Software</li> <li>Interface description</li> <li>SURPAC concept</li> <li>Interface Concept</li> <li>General Concept</li> </ul>
Prerequisites	
Available Online	Yes

### Learning Experience for GEOVIA Pushback Optimizer - JPBCGE-OC

Pratice Whittle Advanced	
Course Code	GEO-en-GWE-A-GEOVIAR11
Available Releases	GEOVIA Whittle 2021, GEOVIA Whittle 2023
Duration	8 hours
Course Material	
Level	Advanced
Audience	
Description	In this module, we shall go beyond the options covered in the basic module. The functions, options and methods covered in this training are still considered core Whittle knowledge.
Objectives	<ul> <li>To go further in Whittle this course will cover:</li> <li>Understanding of the Background files</li> <li>Re-blocking</li> <li>Import surfaces</li> <li>Grade-tonnage graph</li> <li>Mining width</li> <li>Block value calculation</li> <li>Mining Direction</li> <li>Combine block models in Whittle for optimization</li> </ul>
Prerequisites	<ul> <li>Basic understanding of the Geology and Mine Planning packages.</li> <li>Knowledge of Mining Engineering terminologies.</li> <li>Block Model Concepts.</li> <li>GEOVIA Whittle installed and licensed.</li> <li>Practice Whittle Essentials course completed.</li> <li>Basic knowledge of GEOVIA Whittle, at least at the level provided by the introductory course.</li> <li>Optional: GEOVIA Surpac installed and licensed.</li> </ul>

	Pratice Whittle Advance	ed
Available Online	Yes	

Pratice Whittle Fundamentals		
Course Code	GEO-en-GWE-F-GEOVIAR11	
Available Releases	GEOVIA Whittle 2021, GEOVIA Whittle 2023	
Duration	8 hours	
Course Material		
Level	Fundamental	
Audience		
Description	In this module, we will see how to set up a project in GEOVIA Whittle, perform pit optimisation step and basic output analysis. This is the first in a series of courses that aims to provide introduction to strategic mine planning and scheduling concepts for open pit mines utilizing GEOVIA Whittle.	
Objectives	<ul><li>Basic output analysis</li><li>Introduction to strategic mine planning</li><li>Scheduling Concepts</li></ul>	
Prerequisites	<ul> <li>Prerequisites</li> <li>Basic understanding of the Geology and Mine Planning packages.</li> <li>Knowledge of Mining Engineering terminologies.</li> <li>Block Model Concepts.</li> <li>GEOVIA Whittle licensed.</li> <li>Optional: GEOVIA Surpac installed and licensed.</li> </ul>	
Available Online	Yes	

### Learning Experience for GEOVIA Tactical Mine Planner - JMPCGE-OC

Practice MineSched Fundamentals	
Course Code	GEO-en-GMF-F-GEOVIAR4
Available Release	GEOVIA MineSched 2021
Duration	8 hours
Course Material	
Level	Fundamental
Audience	Mining Engineers, Mine Planning Engineers, Mine Schedulers, Open Pit Mine Engineers, Medium Term Planners
Description	In this course, users will understand the basic concepts of the GEOVIA MineSched™ open pit scheduling and execute a simple scenario.
Objectives	The course aims to provide basic introduction to mine planning and schedulling concepts for an open pit mine utilising GEOVIA MineSched
Prerequisites	<ul> <li>Basic understanding of the Geology and Mine Planning packages</li> <li>Knowledge of Mining Engineering terminologies</li> <li>Block Model Concepts (constraints, assign value and reporting)</li> <li>GEOVIA MineSched licensed</li> <li>GEOVIA SURPAC licensed</li> </ul>
Available Online	Yes

Practice Minesched Underground	
Course Code	GEO-en-GMU-F-GEOVIAR4
Available Release	GEOVIA MineSched 2021
Duration	8 hours
Course Material	
Level	Fundamental
Audience	
Description	In this course, user will understand the basic concepts of the GEOVIA MineSched™ Underground scheduling and execute a simple underground mine use case. At the end of this course user should be able to schedule basic underground MineSched scenario.
Objectives	Basic concepts of the Underground scheduling
Prerequisites	<ul> <li>Pre Requisites:</li> <li>Personal workstation with minimum specifications,</li> <li>Basic understanding of the Geology and Mine Planning packages,</li> <li>Knowledge of Mining Engineering terminologies,</li> <li>GEOVIA MineSched Installed and licensed.</li> </ul>
Available Online	Yes

