

Course Catalog

GEOVIA Africa

January-March 2017



3DEXPERIENCE®

Classroom Training Calendar

Product	Course	Location	Date	Cost per Delegate
GEMS	Foundation	Midrand, Johannesburg	16 – 18 Jan	\$2400/R19200
Whittle	Foundation	Midrand, Johannesburg	16 - 18 Jan	\$2400/R19200
GEMS	Geology Modelling	Midrand, Johannesburg	16 - 20 Jan	\$4000/R32000
Minex	Geology	Midrand, Johannesburg	16 - 20 Jan	\$4000/R32000
Surpac	Geostats	Midrand, Johannesburg	23 - 25 Jan	\$2400/R19200
Minex	Surface Engineering	Midrand, Johannesburg	23 - 27 Jan	\$4000/R32000
Surpac	Foundation	Midrand, Johannesburg	23 – 27 Jan	\$4000/R32000
MineSched	Surface Scheduling	Midrand, Johannesburg	23 – 27 Jan	\$4000/R32000

GEMS	Foundation	Midrand, Johannesburg	01 – 03 Feb	\$2400/R19200
Whittle	Foundation	Midrand, Johannesburg	01 - 03 Feb	\$2400/R19200
GEMS	Open Pit Mine Design	Midrand, Johannesburg	06 - 08 Feb	\$3200/R25600
Minex	Geology	Midrand, Johannesburg	06 – 10 Feb	\$4000/R32000
Surpac	Geostats	Midrand, Johannesburg	08 - 10 Feb	\$2400/R19200
Minex	Surface Engineering	Midrand, Johannesburg	20 - 24 Feb	\$4000/R32000
Surpac	Geology Foundation	Midrand, Johannesburg	20 – 24 Feb	\$4000/R32000
MineSched	Surface Scheduling	Midrand, Johannesburg	20 – 24 Feb	\$4000/R32000

GEMS	Foundation	Midrand, Johannesburg	01 – 03 Mar	\$2400/R19200
Whittle	Foundation	Midrand, Johannesburg	01 - 03 Mar	\$2400/R19200
GEMS	Underground Mine Design	Midrand, Johannesburg	06 - 09 Mar	\$3200/R25600
Minex	Coal Washability & Fault Modelling	Midrand, Johannesburg	13 – 15 Mar	\$2400/R19200
GEMS	Open Pit Mine Planning	Midrand, Johannesburg	13 - 16 Mar	\$3200/R25600
Minex	Underground Engineering	Midrand, Johannesburg	13 - 17 Mar	\$4000/R32000
Surpac	Mine Planning	Midrand, Johannesburg	13 – 17 Mar	\$4000/R32000

GEOVIA

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GEMS Foundation

Course Code	N/A
Available	2016
Duration	3 days / 24 Hours
Course Material	English
Level	Foundation
Audience	New Users
Description	<p>This course covers basic data base management concepts, data entry and editing, drillhole, point, polyline, and triangulation display, report generation, and data manipulation, filtering, basic 3D modelling of surfaces and solids and plotting using Plotmaker.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none">• Create a new project in GEMS• Customise your graphical area to suit your working needs• Create, add and modify workspaces• Set up profiles for all parameters in the system• Add and modify section views• Load and display data in the graphical work are• Filter and manipulate data in the workspace• Plotting data• Use Plotmaker to define specific plot styles
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none">• Knowledge of windows and operating systems• Knowledge of file management• Knowledge of ASCII format files and Microsoft® and Excel®
Available Online	No

GEMS Geology Modelling

Course Code	N/A
Available	2016
Duration	3 days / 24 Hours
Course Material	English
Level	Intermediate
Audience	Geological Professional
Description	<p>The focus is on geological modelling principles and modeling techniques. It covers a variety of methods to model different orebody types and country rock environment, utilizing polylines, drillholes, surfaces and solids. Some aspects of resource evaluation and reporting will be discussed.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Create and manage triangulation workspace • Utilize polyline tools to interpret and model their deposit • Create new solids using one set of rings and tie lines, or two sets of geological rings • Create folded surfaces using two sets of lines • Report analytical volumes of solids and perform validity checking • Define solid profiles, and apply different profiles to individual solids
Prerequisites	GEMS Foundation course, as well as strong understanding of polyline concepts and CAD tools.
Available Online	No

GEMS Open Pit Mine Design

Course Code	N/A
Available	2016
Duration	2 days / 16 Hours
Course Material	English
Level	Intermediate
Audience	Mine Engineers
Description	<p>This course is designed for mine engineers who are responsible for activities required to design and manage pit designs. Such activities include designing pits, ramps, pit pushbacks and dumps. In addition to these activities, other mine engineering tasks such as volumetrics of ore concentrate stockpiles within the pit design will be investigated.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Assign parameters to design that define berm width, pit slope angle, and batter angle. • Create a surface triangulated irregular network, or surface tin, from the pit design. • Create final pit designs complete with toes, crests, ramps, switchbacks, and slots • Obtain volumes, tonnages and grades reported by bench, rock type, and grade range from the pit design.
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® 2000, XP, Vista® or Windows 7 Operating system • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • GEMS Foundation Course • A strong understanding of polyline concepts and CAD tools.
Available Online	No

GEMS Underground Mine Design

Course Code	N/A
Available	2016
Duration	4 days / 32 Hours
Course Material	English
Level	Intermediate
Audience	Underground Engineers
Description	This course comprises several separate courses that include solids modelling, volumetrics, mine design using the tunnel module and underground Blast design.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Build engineering solids (e.g. stopes). • Mine design using the GEMS Tunnel module to design underground development. • Use the ramp design module to design ramps • Compare design vs. actual of the development. • Run volumetrics reports to calculate resource and reserves. • Design underground blast rings and generate drilling and charging reports.
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Successful completion of GEMS Foundation course
Available Online	No

Whittle Foundation	
Course Code	N/A
Available	2016
Duration	3 days / 24 Hours
Course Material	English
Level	Foundation
Audience	New users of Whittle
Description	<p>The GEOVIA Whittle Foundation Course is designed for new users of Whittle to provide them with a basic understanding of the open pit optimization and strategic mine planning principles, and their practical application using Whittle software.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Knowledge of the theory of pit optimization • Produce long term mine schedules using basic techniques available in Whittle software • Import a model file and complete an optimization using cost and price information • Knowledge of the concepts of mine planning • Import block model files and produce optimized pit shells • Use different techniques to apply costs and generate results
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® Operating Systems • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • It is recommended, but not compulsory, that students undertake Surpac or GEMS Foundation Course or have knowledge of another mine planning package. <ul style="list-style-type: none"> • Basic exploration and mining knowledge
Available Online	No

Minex for Geologists

Course Code	N/A
Available	2016
Duration	5 days/ 40 Hours
Course Material	English
Level	Intermediate to Advanced
Audience	Geologists
Description	<p>It covers the basic requirements and setup steps with practical examples and demonstration datasets required to create a detailed geological model of a deposit.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Installation • Use of Minex interface and associated tools • In-depth understanding of the Minex data types and concepts • Import and export data • Seam cross sectioning • Manipulation and creation of grids • Plotting techniques • Printing • Create fault lines/ strings • Create a borehole database • Load a borehole database • Report boreholes <p>There are several more outcomes that will be achieved and will be explained further upon enquiry.</p>
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows ® Operating Systems • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel®
Available Online	No

Minex for Surface Engineering	
Course Code	N/A
Available	2016
Duration	5 days/ 40 Hours
Course Material	English
Level	Intermediate
Audience	Surface Engineers/ First time Users
Description	<p>The GEOVIA Minex for Surface Engineers course enables users to understand the basics of Minex and how to apply the pit design, open pit reserve database module and open pit scheduling, enabling you to design and assess different pit designs.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • GEOVIA Overview • Installation • Use Minex interface and associated tools • In-depth understanding of the Minex data types and concepts • Project set up and maintenance • Creating and opening files • View 3D graphical environment • Import and export data • Digitise/edit strings • Create plans and sections • Generate ramps • Initialise/Build Reserves database • Report and Display Reserves Database • Detailed Schedule – rules and monitor <p>There are several more outcomes that will be achieved and will be explained further upon enquiry.</p>
Prerequisites	None.
Available Online	No

Minex for Washabilities

Course Code	N/A
Available	2016
Duration	2 days / 16 Hours
Course Material	English
Level	Intermediate to Advanced
Audience	Geologists
Description	<p>It covers the basic requirements and setup steps with practical examples and demonstration datasets required to create a detailed washability model of a deposit.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Creating a Washability Database • Create new Washability Analysis types and variables • Import Cumulative or Incremental wash data • Report and verify imported data • Regularize wash data • Create Washability data type and variables in Borehole database • Update Borehole Database with wash data • Detailed Washability Product • Run of Mine Beneficiation • Wash Grid creation • Washability Product Resource reporting
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® Operating Systems • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • GEOVIA Minex™ for Geologists workshop
Available Online	No

Minex for 3D Fault Modeling

Course Code	N/A
Available	2016
Duration	2 days / 16 Hours
Course Material	English
Level	Intermediate to Advanced
Audience	Geologists
Description	<p>It covers the basic requirements and setup steps with practical examples and demonstration datasets required to create a detailed faulted geological model of a deposit.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Digitize 2D and 3D fault strings • Create 2D “No-Throw”, 2D “With-Throw” and 3D Fault models • Use borehole seam data to create a 2D faulted model • Select Geometry data when generating grids (single/Multi seam – Multi Variable) • Select 3D Faults for 3D Fault Gridding • Edit 3D fault strings • Generate 3D fault blocks • “UnFault” borehole database • Create “UnFaulted” seam grids • “Refault” Seam grids • Create seam cross sections showing faulted model
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® Operating Systems • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • GEOVIA Minex™ for Geologists workshop
Available Online	No

Minex for Underground Engineers	
Course Code	N/A
Available	2016
Duration	5 days / 40 Hours
Course Material	English
Level	Foundation
Audience	Underground Engineers
Description	<p>This course will enable the user to understand the basic concepts of Minex and to utilise the Underground Engineering module's design features.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Installation • Use Minex interface and associated tools • In-depth understanding of the Minex data types and concepts • Import and export data • Seam cross sectioning • Manipulation and creation of grids • Plotting techniques • Project set up and maintenance • View 3D graphical environment • Create plans and sections • Volume calculations <p>There are several more outcomes that will be achieved and will be explained further upon enquiry.</p>
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® Operating Systems • Knowledge of ASCII format files and Microsoft® Excel® • Previous exposure to underground mining industry
Available Online	No

Surpac Foundation

Course Code	N/A
Available	2016
Duration	5 days / 40 Hours
Course Material	English
Level	Intermediate to Advanced
Audience	Designed for New Users
Description	<p>It covers concepts and procedures that will allow the user to perform basic functions in the system, and will serve as a basis for more advanced training. Users will be taken through introductory concepts to more advanced levels and on completing the course will feel confident in finding applications for the software in their daily routines.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Install and license Surpac • Customise the interface and icons • Use the basic components of the system for setting up and viewing data • Understand the data types, concepts and file structure • Create new data for points, lines and surfaces • Understand the concepts of surfaces and generate them • Generate simple volume calculations between surfaces • Display and create basic solids
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® 2000, XP, Vista® or Windows 7 Operating System • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Basic Microsoft Access® skills
Available Online	No

Surpac Geostats

Course Code	N/A
Available	2016
Duration	3 days / 24 Hours
Course Material	English
Level	Intermediate
Audience	Resource Geologists
Description	<p>This course comprises several separate courses that include, drillhole compositing; basic geostatistical analysis; block model setup and updating, including various interpolation techniques (e.g. inverse distance, kriging, etc.); explore different methods of categorizing, reporting volumes and tonnages for resources; Create different types of drillhole and bench composites.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Resource estimation • Classification techniques
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows® 2000, XP, Vista® or Windows 7 Operating System • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Basic Microsoft Access skills • Completion of Surpac Foundation • Including basic concepts such as drillhole databases, compositing, surface and solid modelling and basic statistics.
Available Online	No

Surpac for Geologists

Course Code	N/A
Available	2016
Duration	5 days / 40 Hours
Course Material	English
Level	Intermediate to Advance
Audience	Geologists
Description	<p>The GEOVIA Surpac for Geologists course is designed for geologists who would like to refresh their skills on concepts within the modules relevant to their roles. The course will provide users with a good understanding of using Surpac and is essential for geologists to perform every day and more advanced tasks with the software.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Install and license Surpac • Customise the interface and icons • Use the basic components of the system for setting up and viewing data • Understand the data types, concepts and file structure • Understand the geology data types and concepts • Display drillhole data and block models <p>There are several more outcomes that will be achieved and will be explained further upon enquiry.</p>
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows ® Operating Systems • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Knowledge of geological science
Available Online	No

MineSched for Surface Scheduling

Course Code	N/A
Available	2016
Duration	5 days / 40 Hours
Course Material	English
Level	Intermediate to Advance
Audience	Surface and Underground Operators
Description	<p>This course is designed to give a basic understanding of how to set up a surface schedule, perform some reporting and define material flow.</p> <p>The latest version includes these features:</p> <ul style="list-style-type: none"> • Reverse vertical lag or constant face distance • Blending from multiple stockpiles to multiple processes
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Set up data file structure • Apply constraints • Manipulate and interrogate the Block Model • Run a MineSched schedule • Set basic MineSched starting parameters • Report MineSched schedule information • Check input validation • Manipulate material movement • Prepare a MineSched model • Assign material targets and ratios
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Knowledge of Windows 2000, XP, or Vista Operating System. • Knowledge of file management. • Knowledge of ASCII format files and MS Excel. • Completion of the GEOVIA Surpac Foundation course or similar experience
Available Online	No

