

GEOVIA Surpac Course Catalog North America



ABOUT OUR TRAINING COURSES

Dassault Systèmes offers a wide range of GEOVIA training courses designed to suit all levels of mining professionals, from Geologists and Engineers through to Technical and Project Managers. Whether you're an experienced user or just starting out in your career, our training courses will enable you to get the most out of your GEOVIA products.

Please note that training sessions shall be limited to six (6) participants per instructor or two (2) participants per virtually connection to ensure all topics are covered and questions are addressed within the time allotted.

CLASSROOM TRAINING IN NAM

GEOVIA Classroom Training courses are conducted at our Dassault Systèmes offices in Toronto, Vancouver and Montreal subject to instructor availability.

The dates for GEOVIA Classroom training course are flexible and are determined by market demand. For further information on a course or to find out when the course availability, please email us at GEOVIA.NAM.training@3ds.com or call +1 866 560 5846.

ONSITE – CUSTOMISED TRAINING

GEOVIA conducts custom training in which Client's chose their preferred dates, location, topics and/ or data. Groups of users requiring training make this a cost effective training solution. If you would like customized onsite training tailored to your operation's needs, please contact using the information below.

SERVICES

GEOVIA can assist with geology, engineering and operations activities. With over 25 years of expertise working with diverse commodities and mining environments, our typical services assignments span the spectrum of the value mining chain including: modelling, design, scheduling, data management, automated workflows, system configuration, and material movement tracking.

For more information, please [click here to visit our Services information page](#).

CONTACT US

For all **TRAINING & SERVICES ENQUIRIES**

Email: GEOVIA.NAM.Training@3ds.com

Tel: +1 866 560 5846

Surpac Foundation	
Course Code	S_F_1
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	1 day
Course Material	English, French (upon request), Spanish (upon request)
Level	Fundamental
Audience	<i>Designed for New Users</i>
Description	It covers concepts and procedures that will allow the user to perform basic functions in the software, and will serve as a basis for good working methodology and processes in Surpac.
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 • Understand the fundamental concepts of the software • Customise the interface to user preferences • Use the available visualisation and CAD tools to import, create, edit and display data • Create points, lines and surfaces • Use data mathematical manipulation tools • Interact with surfaces • Generate volume calculations from surfaces • Create simple plots
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Background in mining, surveying or geological sciences • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

* Virtual training requires adequate internet connection

Surpac Geological Modelling	
Course Code	S_GM_2
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	2 days
Course Material	English, French (upon request), Spanish (upon request)
Level	Fundamental & Intermediate
Audience	<i>Designed for New & Existing Users</i>
Description	It focuses on geological concepts and processes within the software. The course will provide users with an understanding of modelling methods that can be applied by geologists in their everyday work.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Understand data types and concepts involved in geological modelling tasks • Create and manage geological drillhole databases • Import, analyse and report information from geological drillhole databases • Perform various functions with Surpac drillhole database module • Create and plot sections of drillhole data • Digitize ore outline sections graphically • Create different types of drillhole and bench composites
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Knowledge of geological science • Basic Microsoft Access skills <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Open Pit Design	
Course Code	S_OP_2
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	2 days
Course Material	English, French (upon request), Spanish (upon request)
Level	Fundamental & Intermediate
Audience	<i>Designed for New & Existing Users</i>
Description	The course covers surface engineering toolset. The course will demonstrate the workflow for creating pits, dumps and other surface design features allowing the user to analyze and compare results.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Understand pit and dump design concepts • Create detailed pit and dump designs • Create road designs incorporating super-elevation and vehicle velocities • Create simple dam and dike designs • Generate surfaces for all designed features • Gridding and contouring of surface data • Generating bench plan views and reports • Block model tonnage and grade calculations • Cut and fill volume calculations
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Knowledge of geological science • Basic Microsoft Access skills <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Drill and Blast Design	
Course Code	S_DB_1
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	1 day
Course Material	English, French (upon request), Spanish (upon request)
Level	Fundamental & Intermediate
Audience	<i>Designed for New & Existing Users</i>
Description	The course will provide users with a comprehensive workflow for blast design, from start to finish.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none">• Understand drill and blast design concepts• Design simple blast patterns• Create designs based on rock mass classifications• Load blastholes and tie in a firing sequence• Create blast boundaries and blast solid• Create pre-split holes along lines and surfaces• Create blasthole drilling and loading reports
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none">• Completion of Surpac Foundation course is required• Knowledge of file management• Knowledge of ASCII format files and Microsoft® Excel®• Knowledge of geological science• Basic Microsoft Access skills <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Underground Mine Design	
Course Code	S_UG_3
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	3 days
Course Material	English, French (upon request), Spanish (upon request)
Level	Intermediate & Advanced
Audience	<i>Designed for Existing Users</i>
Description	The course covers advance topics to provide the user with the knowledge of all the tools available in conducting underground mine development.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Design underground ramps, shafts, access drives, and related development • Create stopes using manual and automated design tools • Block model tonnage and grade calculations • Underground ring design and hole charging • Plot level plans and longitudinal sections • Create, repair, and validate solids
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Basic experience/competency in the use of Surpac is required • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Knowledge of geological science • Basic Microsoft Access skills <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Plotting	
Course Code	S_P_1
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	1 day
Course Material	English, French (upon request), Spanish (upon request)
Level	Intermediate
Audience	<i>Designed for Existing Users</i>
Description	The course will solidfy user's knowledge of Surpac's plotting capabilities. A review of AutoPlot will examine the in's and out's of file-based plotting.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • AutoPlot: Contours, Drillhole Layout, Surface Geochemistry, DTM sections, BM sections, DH Sections • File-Based Plotting • Entities • Maps: Contours, Drillhole Layout, Surface Geochemistry, DTM sections, BM sections, DH Sections • Introduction to macros for plotting • Plotting Markup • Plot Sheet Setup
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Basic experience/competency in the use of Surpac is required • Knowledge of file management • Knowledge of ASCII format files and Microsoft® Excel® • Knowledge of geological science • Basic Microsoft Access skills <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Block Modelling	
Course Code	S_BM_2
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	2 days
Course Material	English, French (upon request), Spanish (upon request)
Level	Intermediate & Advanced
Audience	<i>Designed for Existing Users</i>
Description	The course is for resource geologists who want to become familiar with the steps necessary for resource estimation: from compositing to geostatistics and block modelling.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Understand importance of geology and domaining • Compositing • Basic Statistics • Variogram Modelling • Creating Block Models • Block Model Display/ Attributes • Basic Block Model Estimation (Inverse Distance & Ordinary Kriging) • Block Model Constraints/Reporting/Validation
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Experience/competency in the use of Surpac is required • Completion of Surpac Geological Modelling course is recommended • General Knowledge of geostatistical principles including variography and interpolation • Knowledge of ASCII format files and Microsoft® Excel® • Knowledge of geological science • Basic Microsoft Access skills <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Basic Macros For Automation	
Course Code	S_BMA_2
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	2 days
Course Material	English, French (upon request), Spanish (upon request)
Level	Intermediate
Audience	<i>Designed for Existing Users</i>
Description	The course is for users to gain the proficiency to modify recorded scripts by adding user forms, variables and control logic to customize and automate daily tasks performed with Surpac.
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Record TCL macros to accomplish a specific goal • Insert user forms and control logic into recorded macros • Use various TCL commands to achieve your goal • Modify and debug existing site macros • Confidence to explore further TCL/SCL commands
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Experience/competency in the use of Surpac is required • Knowledge of text editor e.g. Notepad or CONText <p>The Surpac menu structure and graphical user interface (GUI) are similar to most Windows-based packages and therefore a basic knowledge of the Windows operating system and environment is necessary.</p>

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Surpac Advanced Macros	
Course Code	S_AM_2
Available	On-site NAM: Toronto, Vancouver, Montreal on demand Virtual*
Duration	2 days
Course Material	English, French (upon request), Spanish (upon request)
Level	Advanced
Audience	<i>Designed for Existing Advanced Users</i>
Description	<p>The course is designed to provide users with the necessary skills required to create complex macros for Surpac. It endeavors to show participants practical techniques in building and maintaining TCL/SCL scripts including constructing libraries of reusable macro code. Many TCL/SCL commands will be uncovered and practical examples given to demonstrate their use. Participants will gain a good understanding of programming techniques using TCL.</p>
Objectives	<p>Upon completion of this course, you will be able to accomplish the following:</p> <ul style="list-style-type: none"> • Debugging • Compiling • TCL Extensions: Tcllib, TcLODBC, TWAPI, TCOM • Interacting with databases • SQL statements • Advanced forms • Geometry & Math operations • Resources
Prerequisites	<p>Before taking this course, you require the following:</p> <ul style="list-style-type: none"> • Completion of Surpac Foundation course is required • Completion of Surpac Basic Macros course is required • Experience/competency in the use of Surpac is required • Knowledge of text editor e.g. Notepad or CONText • Some knowledge of the following TCL/SCL concepts: <ul style="list-style-type: none"> ○ TCL syntax, variable and command substitution, and grouping constructs ○ Creating basic user forms ○ Use of basic TCL commands like expr and string ○ Use of if statements to perform branching ○ Use of while and for statements to perform looping <p>The Surpac menu structure and graphical user interface (GUI) are</p>

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