

SAVE THE DATE

2025 ONLINE TRAINING PROGRAM ON APPLIED RESOURCE MODELING



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February 21st
**Fundamentals of
Geostatistics**

May 23rd
**Resource
Classification
Workflows**

March 21st
**Estimation
Workflows:
Geological and grade
Modeling**

June 27th
**Python Scripting and
Workflow
Automation**

April 25th
**Simulation
Workflows:
Geological and grade
Modeling**

July 25th
**Annapurna
Resource:
A Complete
Workflow Guide**

DETAILED INFO AND REGISTRATION IN THIS POST.

Training Program 2025 - Applied Resource Modeling

Advanced Predictive Modeling Technology Ltd. ([APMT](#)) is pleased to announce its **2025 Online Training Program** on **Applied Resource Modeling**.

Designed for professionals and researchers, this hands-on program is led by industry experts and emphasizes problem-solving and discovery across all levels, from fundamentals to advanced predictive modeling techniques. Participants will develop practical expertise in modern resource modeling, equipping them to tackle real-world challenges and make informed, data-driven decisions. Upon finishing the course, participants will receive a certificate of completion.

To enhance the learning experience, participants will have access to a licensed version of the [Annapurna Suite](#), providing cutting-edge tools for applied resource modeling, for 1 week.

Module	Date		Delivered in
Fundamentals of Geostatistics	Feb. 21	08:30 - 14:00 (EST)	English
Estimation Workflows: Geological and Grade Modeling	Mar. 21	08:30 - 14:00 (EST)	English
Simulation Workflows: Geological and Grade Modeling	Apr. 25	08:30 - 14:00 (EST)	English
Resource Classification Workflows	May. 23	08:30 - 14:00 (EST)	English
Python Scripting and Workflow Automation	Jun. 27	08:30 - 14:00 (EST)	English
Annapurna Resource: A Complete Workflow Guide	Jul. 25	08:30 - 14:00 (EST)	English

To ensure a high-quality experience there are limited seats available

PRICING, ENROLLMENT, AND PAYMENT

Each module has a price of **CAD 790**, and participants can enroll in the **full program** at a discounted rate of **CAD 2,900**. Registration and payment can be completed through Eventbrite. Prices do not include taxes and Eventbrite fees. For further details, feel free to contact us at contact@apmodtech.com.

Courses	Enrollment and Payment links
Fundamentals of Geostatistics	Module 1 - Link
Estimation Workflows: Geological and Grade Modeling	Module 2 - Link
Simulation Workflows: Geological and Grade Modeling	Module 3 - Link
Resource Classification Workflows	Module 4 - Link
Python Scripting and Workflow Automation	Module 5 - Link
Annapurna Resource: A Complete Workflow Guide	Module 6 - Link
Full Program	Full Program - Link

COURSE OVERVIEW

Fundamentals of Geostatistics (3rd Edition)

This module provides an essential foundation in geostatistics, covering fundamental concepts such as domaining, variogram modeling, spatial continuity analysis, declustering, capping, high yield, contact analysis, and more. Participants will engage in hands-on exercises using the Annapurna Suite on real mining datasets, gaining a solid understanding of statistical tools used for resource modeling. The course is designed for geologists, mining engineers, and geoscientists looking to enhance their skills in geostatistical modeling.

Estimation Workflows: Geological and Grade Modeling

This module focuses on estimation techniques for geological (Indicator Kriging) and grade (Kriging) modeling, emphasizing best practices on complex deposits. Using the Annapurna Suite, participants will work through real-world case studies, reviewing key concepts such as exploratory data analysis, domain boundary conditions, locally varying anisotropy, dynamic search, kriging passes, swath plots, grade tonnage curves, statistical validation, visual validation, and more. The course is designed for geologists, mining engineers, and geoscientists looking to enhance confidence in resource estimation workflows.

Simulation Workflows: Geological and Grade Modeling (2nd Edition)

This module provides a comprehensive guide to categorical (Indicator simulation) and continuous (Gaussian simulation) geostatistical simulation, from foundational concepts to hands-on applications. Participants will review simulation principles, discuss the differences with estimation, and execute practical examples. During the course, typical workflows, parameters, and assumptions needed for effective simulation are reviewed through a complete example, simulating using drill-hole data to assess mining risk and discussing post-processing techniques and support issues. The course is designed for geologists, mining engineers, and geoscientists looking to improve their understanding of simulation tools for resource modeling.

Resource Classification Workflows

This module explores classification techniques used in mineral resource estimation, aligning with industry standards (JORC, NI 43-101, and CIM guidelines). Participants will work through classification workflows, including uncertainty quantification based on kriging variance, confidence level assessment based on grade simulation, drill hole spacing analysis based on information density, and reporting best practices. The course integrates practical exercises to guide participants through key steps in resource classification, ensuring reliable and defensible resource estimates.

Python Scripting and Workflow Automation (3rd Edition)

This hands-on course covers essential skills for working with mining datasets, from data manipulation to 3D visualization and geostatistical modeling. Participants will start by learning to efficiently handle block models and drill-hole data in Python. The course then introduces object-oriented programming, building foundational classes for predictive modeling applications. Next, participants will explore 3D visualization techniques for block models and drill-hole data. The final section delves into scripting and automating geostatistical tasks, including 3D kriging estimation. The curriculum is designed to progressively build practical Python skills. *Note: The course includes Python code. Coding experience is beneficial but not required.*

Annapurna Resource: A Complete Workflow Guide

This module provides a structured approach to leveraging Annapurna Resource for efficient and effective resource modeling. Participants will explore a set of end-to-end workflows, from data integration and visualization to advanced modeling techniques and reporting. Key topics include setting up a resource model workflow in Annapurna, applying geostatistical tools, performing scenario analysis, and balancing automation and customization to take the most out of expert knowledge into the resulting resource models. Through hands-on exercises and practical applications, attendees will develop a comprehensive understanding of how to use Annapurna Resource to streamline resource modeling and decision-making processes.

MEET YOUR INSTRUCTORS

The 2025 Training Program on Applied Resource Modeling is led by our industry experts with deep experience in Orebody Knowledge and the Mine Value Chain. They will guide participants through hands-on, practical sessions designed to build advanced skills for real-world applications in the mining industry.



Dr. Julian Ortiz
Co-Founder, CEO
Principal Consultant

Dr. Ortiz is Co-Founder, CEO and Principal Consultant at APMT. He is a Mining Engineer from Universidad de Chile and Ph.D. from University of Alberta. Currently, he is Professor and Mark Cutifani / Anglo American Chair in Mining Innovation at University of Exeter - Camborne School of Mines, in the United Kingdom, where he conducts research related to geostatistical ore body estimation and simulation, and geometallurgical modeling using statistical learning. Dr. Ortiz previous roles include Head of Department at Queen's University and Universidad de Chile. He has over 25 years of consulting experience in sampling, ore body modeling, predictive geometallurgy, and technology adoption.



Dr. Sebastian Avalos
Co-Founder, CTO
Principal Consultant

Dr. Avalos is Co-Founder, CTO and Principal Consultant at APMT. He is a Mining Engineer and M.Sc. in Mining from Universidad de Chile, and Ph.D. in Mining Engineering from Queen's University. Author of the Annapurna Resource cloud-based mining software solution. He focuses on the application of conventional and advanced predictive modeling techniques in the mining industry. With over 12 years of experience and working on the frontier between deep learning, advanced geostatistics, and mine planning, Sebastian has led and contributed to the realization of more than thirty-eight mining-related projects, published peer-reviewed articles, conference proceedings, and professional training programs.

FINAL REMARKS

- **Active Annapurna Suite Platform.** Gain one-week access to the Annapurna Platform.
- **Essential Resources.** Access a comprehensive collection of scripts, datasets, and materials before the course begins, ensuring you're fully prepared from day one.
- **Effortless Setup.** Follow straightforward, step-by-step instructions for IDE installation and Python package setup for a smooth, worry-free start.
- **Certificate of Completion.** Receive a certificate to highlight your skills and workshop completion, enhancing your professional profile.
- **Recorded Sessions.** Did you miss a session? All workshop sessions are recorded, allowing you to catch up or review at your convenience.