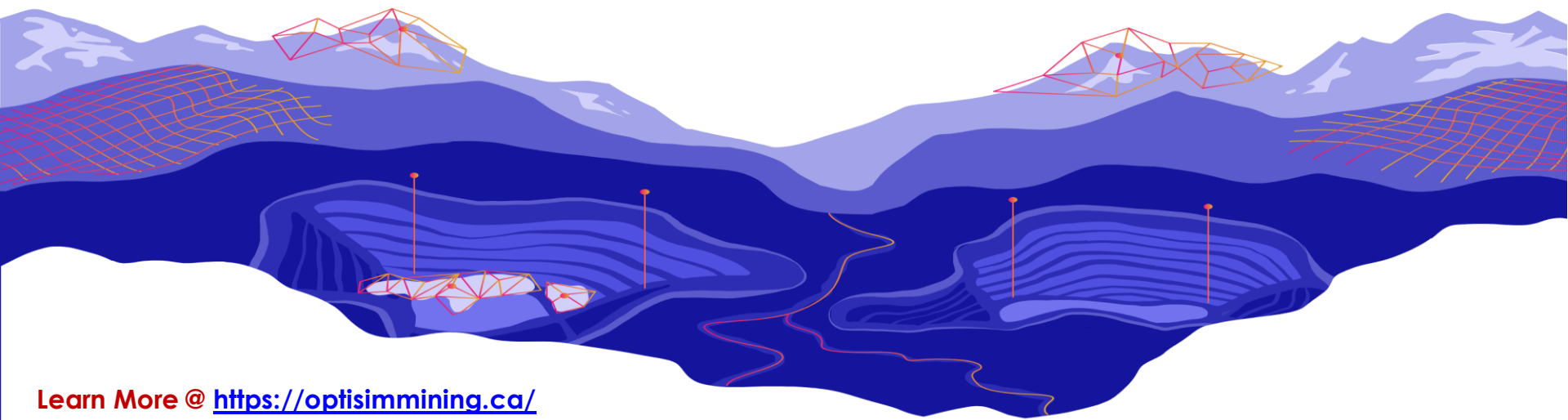




Mine Optimization Training Workshop

OPTIMIZING THE STRATEGIC MINE PLAN: UNLOCKING INTRINSIC VALUE

- Online and In-Person Sessions
- Geovia Whittle Software with 30-day Evaluation License
- OptiSim Mining is an Educational Partner of Dassault Systemes and WAIMM



Learn More @ <https://optisimmining.ca/>

OBJECTIVES & WHO SHOULD ATTEND

Learn how to improve your mine planning techniques

- Understanding the principal concepts of strategic mine planning and improving economic performance such as revenue and cost
- Exploring practical stochastic pit-limit optimization, pushback designs and mine-life estimation
- Learning the principles and concepts of mathematical programming and its applications to integrated mine planning and waste management
- Knowing about open pit/underground mining options optimization
- Understanding mine production scheduling and its financial risk management
- Discovering practical techniques in mine planning for grade, tonnage and metal uncertainty
- Exploring cut-off grades, stockpiling and waste management strategies
- Participating in hands-on computer labs on the applications of new optimization concepts
- Useful for mining, operations, project and exploration managers, mine planners, mine engineers, geoscientists, geostatisticians, geologists, metallurgists, financial analysts, and directors

ONLINE

Date: July 11 - 15, 2022

Time: 8:30am - 5:00pm EST

Location: Zoom

Course fees in US Dollars (exclusive of taxes)

- Regular \$2,700 (Before June 15th, 2022)
- Early Bird \$2,500 (Before June 1st, 2022)
- Multi-person (≥ 2) \$2,500 (Before June 1st, 2022)

Registration Deadline

June 15, 2022

IN-PERSON

Date: August 1 - 5, 2022

Time: 8:30am - 5:00pm GMT

Location: [Busua Beach Resort](#), Ghana

Course fees in US Dollars (exclusive of taxes)

- Regular \$3,200 (Before July 15th, 2022)
- Early Bird \$3,000 (Before July 1st, 2022)
- Multi-person (≥ 2) \$3,000 (Before July 1st, 2022)
- Course fee includes hotel accommodation and all meals

Registration Deadline

July 15, 2022

COURSE OUTLINE

Principal and fundamental concepts in open-pit limit optimization

- Strategic mine planning and economic performance
- Mining revenues and costs
- Open-pit limit optimization
- Practical pushback design with minimum mining width

Principal and fundamental concepts in strategic mine planning optimization

- Life-of-mine production planning/scheduling
- Mine-life estimation
- Cut-off grade optimization and Lane's theory
- Stockpiling strategy
- Directional mining control
- Simultaneous optimization of mining value chain
- Multi-mine multi-process production scheduling
- Mine-to-mill production planning
- Blending and non-linear recovery in processing streams
- Mine planning considerations for contract mining

Strategic mining options optimization, and integrated mine planning and waste management

- Characterization of mineralized mine waste as future resource
- Integrated production and waste disposal scheduling
- Strategic mining options optimization: open-pit mining, underground mining or both
- Open-pit / underground mining transition optimization

Risk-based mine planning

- Mine production risk management and integrated optimization
- Stochastic pit limit optimization and pushback design
- Stochastic mine planning optimization methods
- An approach to mine planning with grade, tonnage and metal uncertainty

Computer Labs with GEOVIA WHITTLE Software

- Case Studies: Oil Sands, Gold, Iron Ore Deposits
- Eleven detailed step-by-step hands-on computer application labs
- Participants will need two monitors for the online training session
- Synchronous online teaching and interaction through Zoom
- Software and pdf of lectures and lab instructions will be provided

ABOUT THE INSTRUCTOR

Eugene Ben-Awuah is an Associate Professor of Mining Engineering at the Bharti School of Engineering, Laurentian University, Sudbury, Canada. He is also the IAMGOLD Research Fellow in Open Pit Mining. Eugene is a registered professional mining engineer and has extensive operational, consulting and research experience from Ghana, Canada and Australia in mine design and optimization, and mine production management.



He teaches and conducts research in strategic mining options optimization, integrated mine planning and waste management optimization, simulation optimization of intelligent and autonomous mining systems, and applications of discrete fracture network. He is a member of the West African Institute of Mining, Metallurgy and Petroleum (WAIMM) and the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). He is Principal Mining Consultant for [OptiSim Mining Solutions](#).

REGISTRATION/ENQUIRIES

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