

# VALUING AND MANAGING MINING PROJECTS WITH REAL OPTIONS

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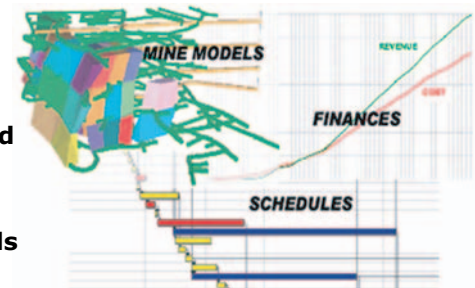
LAURENTIAN UNIVERSITY • SUDBURY, ONTARIO, CANADA

*This three-day course is designed for managers, engineers and professionals associated with the mining and petroleum industries who are evaluating or managing projects or are assessing investment risk.*

Advances in finance theory and risk management have had an important influence on investment decision-making in the finance and insurance industries. Non-financial industries, such as power generation and pharmaceuticals, are now applying these concepts through the real option valuation approach to obtain new insights about project economics, risk and operating policy. Mining and petroleum projects are ideally suited to make use of these techniques and many firms in the industry are beginning to incorporate real options into their project valuation process.

## Learn to use discounted cash flow and real options to:

- Develop a consistent valuation approach that can differentiate projects by their unique cash flow risk characteristics.
- Understand how important elements of project structure influence value and management decisions under uncertainty.
- Move from using the rigid conventional discounted cash flow method to the real options approach that more fully represents the variability of the mining and petroleum environment.
- Build confidence with practical examples for adapting these methods to a wide range of projects.



## Course topics include:

- 1) How characteristics of the natural resource environment influences project value.
- 2) How to combine financial market information, finance theory, and a detailed project description into a valuation model that determines objective risk-adjusted project value and provides an outline of operating strategy.
- 3) An investigation of investment decision situations in the mining and petroleum industries for which these methods are not feasible or appropriate.

The course cost is \$1500 (excluding GST), which includes course notes, lunches and a CD containing required Excel spreadsheets and an Excel Real Option/DCF Binomial Valuation Addin. **Register before**

**August 31 to receive the early-bird price of \$1400.**

To register please contact:

General Inquiries:  
[info@mirarco.org](mailto:info@mirarco.org)

[www.mirarco.org/indexcourses.php](http://www.mirarco.org/indexcourses.php)

**Dr. Michael Samis** completed a M.Sc. degree in Mineral Economics, in South Africa, that focused on using real options to analyse project financing proposals for marginal gold mines. In 2000, he obtained his Ph.D. at the University of British Columbia where he considered the interaction between geological structure, capital and operating costs, management flexibility and project uncertainty. His professional experience includes valuing major projects with complex forms of management flexibility from exploration programs through to late-stage capital investments, and he has provided expert witness affidavits for business litigation involving natural resource valuation problems. Dr. Samis is the Director of Financial Services for Mining and Metals Consulting Group at AMEC E&C Incorporated, and is an Adjunct Professor for the Department of Mining Engineering at Laval University.