

Fundamentals of Project Evaluation and Risk Analysis

An Excel-based course focused on the fundamentals of financial modelling and evaluation of mining projects at the conceptual to pre-feasibility stage and on the identification and quantification of related financial risks.

Audience: The course is an ideal practical introduction to project modelling and financial evaluation for professionals in the mineral exploration, mining and the security industry.

Language: English

Course Content: This four-day course will provide an understanding of the fundamental principles and concepts of finance and project evaluation as applied to the resources sector. Focus will be on practical learning based on construction of a financial model of a mine using Excel. Modelling will progress from an initial simplistic template to a more realistic 'base' case, including more detailed consideration of its revenue function and funding of capital investments during its pre-production stage. Although the model will be based on the Western Australian tax regime, the nature of mining taxation in the broader international context will also be discussed.

Finally, some basic risk analysis concepts will be considered including the use of expected and preference values, decision trees, sensitivity and scenario analyses and Monte Carlo simulation.

Delivery mode: Although the content will be delivered by **Zoom online** to facilitate the attendance of professionals and researchers located remotely, copies of the PowerPoint presentations and Excel spreadsheets will be distributed ahead of the course to encourage participants to familiarise themselves with the subject and attempt to replicate the calculations on their computers before and ideally during the course.

Duration: 4 days (12 hours), three-hour daily sessions from 15:00 to 18:00 (Perth time - GMT+8)

Cost: CET Members AU\$ 360 + GST - Non-Members AU\$ 500 + GST - University Postdocs and Fellows AU\$ 200 + GST - Students AU\$ 100 + GST

Registration: For registration and payment information please visit our website: www.cet.edu.au

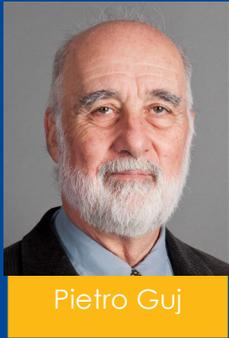
Certificate of Attendance: Upon completion.

24th to 27th August 2021



THE UNIVERSITY OF
WESTERN
AUSTRALIA

Who will be looking after you: Pietro Guj



Dr Pietro Guj is a Research Professor at the Centre for Exploration Targeting of the University of Western Australia and an Adjunct Professor in Mineral Economics at the Western Australian School of Mines of Curtin University.

Prior to these academic roles, his international career includes 23 years in geology and mineral exploration/mining in Asia, Africa and Australia and 16 years in Government where, after a period as a finance executive for the Water Authority, he held the role of Executive Director of the Geological Survey and of Deputy Director General of the Department of Minerals and Energy of Western Australia.

His main interests are in project evaluation, risk analysis and in resources governance with emphasis on the formulation and administration of internationally competitive mining regulatory and fiscal regimes; fields in which he has lectured, published and consulted widely internationally, primarily for the World Bank.

Schedule

DAY / TIME	TOPIC
Tuesday 24/8/2021	Structuring of a simple financial model of a mining project
	General principles, accrual versus cash accounting, real and nominal cash flows
	Revenue function
	Capital and operating costs
	Mineral royalties and corporate income tax
Wednesday 25/8/2021	Refining the simple model
	Net cash flow (NCF)
	Discounting and net present value (NPV) of the project
	Introducing a pre-production period and broad asset classes
	Finalising the model
Thursday 26/8/2021	Risk analysis
	Financial structure (equity v. debt), financial leverage and risk
	Expected Value (EV)
	Risk attitudes, Utility or Preference Value (CE)
Friday 27/8/2021	Risk analysis (cont.)
	Sensitivity and scenario analyses
	Decision trees
	Monte Carlo simulation

For additional information please contact CET Administration : info-cet@uwa.edu.au