

PROFESSIONAL DEVELOPMENT TRAINING COURSES

1-day Introductory Training Courses: Johannesburg 2010

Geology for Non-Geologists
Mining for Non-Miners
Metallurgy for Non-Metallurgists
Mining Finance for Non-Finance Professionals

JOHANNESBURG

Training course	Date 2010		
Geology for Non-Geologists	Mon 12 July	Mon 4 Oct	Mon 29 Nov
Mining for Non-Miners	Tues 13 July	Tues 5 Oct	Tues 30 Nov
Metallurgy for Non-Metallurgists	Wed 14 July	Wed 6 Oct	Wed 1 Dec
Mining Finance for Non-Finance Professionals	Thurs 15 July	Thurs 7 Oct	Thurs 2 Dec

Course Content: GEOLOGY FOR NON-GEOLOGISTS

This one-day introductory course has been designed for non-geologists involved in, associated with or investing in the mining industry. Key geology and resource concepts are explained, along with rock specimens and activities. You will learn how a company progresses a project from early-stage exploration through to a mining reserve. See examples of how to interpret mineral resource and exploration results in stock exchange company announcements. Find out or refresh your knowledge on what is involved behind the scenes, and learn about the key risks to be managed using geological data.

The key concepts covered are:

Geology

An introduction to major rock types and major commodities
 How ore types are formed - key concepts geologists use to explore for new deposits

Examples of major ore types

Samples of key mineral and rock specimens
 Chief physical and chemical characteristics of major commodities

Drilling and resource estimation

Simple explanations of major drilling and sampling methods and when they are used
 What is behind a resource or reserve estimate, and where the principle risks lie

Stock Exchange reporting of resources and reserves

Key requirements of the code, and what should be reported on the stock exchange
 Definitions of exploration results, minerals resources and ore reserves
 How to extract and interpret key geological information from stock exchange reports
 How to spot non-compliance, including a simple checklist you can take with you

Other relevant reporting codes

International codes and their core differences

Key geology and mining terms

Common technical terms used in reporting
 Where to find more information when you need it

Mineral analysis and quality assurance

Major types of mineral and chemical laboratory analysis
 Key risks in sampling and important sampling checks.

Course Content: MINING FOR NON-MINERS

This one-day course has been especially designed for non-miners, and is aimed at providing participants who are new to the mining industry, with knowledge of the fundamentals, operating and technical components of mining. Delegates will gain an understanding of the stages in the life of the mine, differing mining methods, mining process of surface and underground operations, types of mining studies, mine planning parameters and terminology used within the industry. It provides a sound foundation for those involved in or associated with the mining industry, who would like to improve their communication skills and gain a better understanding of the essentials of mining.

The course covers:

Stages in the Life of a Mine

Prospecting,
Exploration,
Development,
Exploitation

Surface Mining Methods - Functions of Open Pit Mining

Design,
Drill and Blast,
Load and Haul,
Equipment

Underground Mining Methods - Functions of Underground Mining

Development,
Production,
Ground Support,
Load and Haul,
Ventilation

Types of Mining Studies

Scoping Level,
Pre-feasibility,
Feasibility

Planning Parameters and Mining Terminology

Course Content: METALLURGY FOR NON-METALLURGISTS

This one-day course has been especially designed for engineers, geologists, mineralogists, environmental scientists, plant operators, marketers, financial advisors and anyone who either deals with mineral processing or would like a better understanding of the principles of extractive metallurgy. It explores principles of geology, mineralogy, chemistry, mineral processing and economics as they apply to mineral processing unit operations and explains in simple terms how metal is geologically detected, extracted and taken to the final metal product. The course provides an overview of extractive metallurgical principles in the design and operation of process plants, and discusses issues such as metallurgical testwork, metallurgical accounting and environmental management.

The course covers:

Introduction into Mineral Processing

Evaluation of New Resources

Unit Operations - Discussion/Examples and Animations

Ore Processing
Particle Technology
Mineral Beneficiation and Extraction
Purification and Recovery Processes
Environmental Management

Plant Optimisation

Process Economy

Typical processes for major commodities

Final Products (Metals and Minerals)

Marketing of product? What can you sell and value add in continues processing?

Course Content: MINING FINANCE FOR NON-FINANCE PROFESSIONALS

This one-day introductory course has been especially designed for anyone involved in mining projects who would like to understand: the basic concepts of financial modelling; what to look for in a financial model; basic investment decisions based on a financial model; and some of the tricks of the trade.

The key concepts covered are:

Financial Accounting System

A brief overview of the principles behind the financial accounting system

The relevance of the financial accounting system to mining finance

Cash Flow Modelling of Mining Projects

Inflation and the Nominal versus Real terminology

The principles behind cash flow modelling

The Discount Rate concept

The Time Value of Money concept

The financial metrics of Net Present Value (NPV), Internal Rate of Return (IRR) and Payback Period (PBP)

Sensitivity Diagrams

Common Mistakes in Mining Finance

Mining Project Funding Options

Internal Funding

Debt Funding

Equity Funding

The Risk versus Return Trade-off

Tricks of the Trade

Presenters

The course presenters will be chosen from Snowden's most experienced consultants.

Mark Burnett - Divisional Manager Resources - Johannesburg Office

BSc (Hons) from the University of the Witwatersrand Post Grad Dip. in Terrain Evaluation (University of the North West)



Mark has 17 years experience in Witwatersrand mine geology and resource estimation. Mark has particular experience in geological modelling, resource estimation, mine planning, technical reviews, due diligences and grade control. Prior to joining Snowden, Mark was the New Business Manager (Technical) for Harmony Gold Mine Ltd. In this role Mark reviewed potential acquisition targets, both locally and internationally. Since joining Snowden Mark has worked on a number of projects, including exploration projects, gold, uranium, coal and base metals. Mark presents Snowden technical courses.

Simon Thompson - Senior Consultant Corporate/Resources

BSc (Hons) Geology (UCT), GDE (Wits), MBA (UCT), MGSSA, Pr.Sci.Nat.



Simon is a diamond and gold geologist with over ten years experience in the fields of exploration, sampling, resource and reserve estimation, production geology and reconciliation, and mineral resource management. Simon's experience has been gained through the De Beers Group at their Cape Town and Windhoek operations, and through AngloGold at their West Wits operations. After completing a MBA (Finance) at the University of Cape Town's Graduate School of Business, Simon moved into the financial field. He joined Snowden in the role of Senior Consultant in the Corporate Division, where he has worked on the financial modelling of gold, platinum, coal, and manganese projects in South Africa and other African countries.

Mark Roux - Senior Resource Geologist

BSc (Hons) Geology, University of Pretoria, MGSSA



Mark has experience in various roles within the diamond industry from grass roots exploration to early stage evaluation of potential kimberlitic bodies; this involved working in a number of African ventures in Botswana, South Africa, Gabon and the Democratic Republic of the Congo fulfilling tasks ranging from raw sampling to project management and due diligence reporting roles. Following his exploration experience Mark moved into the role of resource extension geologist at Finsch Mine in the Northern Cape, where his tasks involved planning and executing underground drill projects, QAQC of logged core, interpretative logging and Gemcom modelling of the Block5 extension of the Finsch kimberlite pipe. Mark is currently completing his GDE with focus on Mineral Resource Evaluation. Mark's expertise is in exploration, diamond geology, data validation, GIS and ore body modelling.

Steve Kirkpatrick - Mining Consultant

BSc Eng (Mining), University of the Witwatersrand MBA, Wits Business School



Steve is a mining engineer with 8 years experience in Southern Africa. Prior to joining Snowden, Steve worked for De Beers on their Koffiefontein (underground) and Venetia (open pit) Mines before completing his MBA full-time at Wits Business School. He returned to mining in a consulting capacity. Steve's experience includes due diligence reports, feasibility studies and financial modelling. His experience is largely in diamond mining but has also worked on gold, platinum, copper and lead/zinc projects.

Fees

Payment required at time of registration. Each course costs R4,950 inclusive of VAT per person.

This fee includes course notes, refreshments and lunch.

Please Note: A 10% discount is offered for booking on 3 or more courses.

Delegate feedback

Geology for Non-Geologists

"The activities participated in were good in proving a hands-on application of the knowledge obtained"

"The content covered in a condensed 1 day program was excellent"

"The presenter had excellent knowledge of the subject which made it easier to relate to the material they were presenting - not just reading slides"

"I found that the practical activities made the sampling and drilling a lot easier to understand. The presenter was very easy to understand and motivated about the subjects"

"The presenter's enthusiasm for the subject helped to keep the content interesting"

Mining for Non-Miners

"Good material (manual) to take away"

"The course was all extremely interesting and very valuable for me and I enjoyed all the parts - thanks"

"The videos shown demonstrated the methods very well"

"The mining methods section was extremely helpful"

Metallurgy for Non-Metallurgists

"The summary notes are great and will allow me to go back for guidance"

"Good use of examples and experience stories"

"The sections on scoping, feasibility and leaching methods were great"

"The most valuable part was learning about basic processes, terminology and reference to specific commodities"

Mentoring - Learn while working on your own data or project.

Snowden provides one-on-one technical mentoring to help develop your knowledge, skills and experience.

Our consultants will guide you to use due process *while you work on your own data or project*.

Take advantage of Snowden's 23 year knowledge and skills base to help fast-track your technical knowledge.

On-site customised courses

All our courses can be customised to suit your specific training requirements and presented either on-site or at a venue of your choice. Please contact Diana Titren, Training Manager, on +61 8 9211 8670 or training@snowdengroup.com for further information.

Contact and registration

For more information on Snowden's Training and Mentoring programmes, please contact Diana Titren, Training Division Manager, on +61 8 9213 9670 or training@snowdengroup.com

To register, please complete the following form and either fax it to Shannon Aitken, Training Coordinator, on +61 8 9322 2576 or email to training@snowdengroup.com

Please visit www.snowdengroup.com for more information about our training courses

Snowden Office Contact Details

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VANCOUVER +1 604 683 7645 BELO HORIZONTE +55 (31) 3222-6286 LONDON +44 1932 268701

REGISTRATION FORM

4 One-day Introductory Courses - Johannesburg -2010

Snowden Mining Industry Consultants, PO Box 77, West Perth, WA 6872 Tel: +61 8 9211 8670

PLEASE FAX YOUR REGISTRATION FORM TO: +61 8 9322 2576

OR EMAIL TO: training@snowdengroup.com

Please tick the course and course date that you will be attending

Training course - Johannesburg	Date 2010			Course Fee
<input type="checkbox"/> Geology for Non-Geologists	<input type="checkbox"/> Mon 12 July	<input type="checkbox"/> Mon 4 Oct	<input type="checkbox"/> Mon 29 Nov	ZAR4,342.11 excl VAT
<input type="checkbox"/> Mining for Non-Miners	<input type="checkbox"/> Tues 13 July	<input type="checkbox"/> Tues 5 Oct	<input type="checkbox"/> Tues 30 Nov	ZAR4,342.11 excl VAT
<input type="checkbox"/> Metallurgy for Non-Metallurgists	<input type="checkbox"/> Wed 14 July	<input type="checkbox"/> Wed 6 Oct	<input type="checkbox"/> Wed 1 Dec	ZAR4,342.11 excl VAT
<input type="checkbox"/> Mining Finance for Non-Finance Professionals	<input type="checkbox"/> Thurs 15 July	<input type="checkbox"/> Thurs 7 Oct	<input type="checkbox"/> Thurs 2 Dec	ZAR4,342.11 excl VAT
Total excluding VAT				ZAR excl VAT
Total less 10% discount for booking on 2 or more courses excluding VAT				ZAR excl VAT
FINAL TOTAL including VAT				ZAR INCL VAT

Important: It is compulsory for South African companies to add 14% VAT to the final total

DELEGATES MUST PLEASE FILL IN ALL THE BOXES

Delegate Name			
Position (in company)			
Company Name			
Address			
Delegate's Telephone:	Delegate's email:		
Person responsible for paying account	Name:	Tel:	Email:
Your company VAT Number:			

PAYMENT OPTIONS

Payment required at time of registration - payment confirms your registration.

A tax invoice will be issued on receipt of payment.

Please tick your payment option.

Cheque - Please enclose a cheque made payable to Snowden Mining Industry Consultants

OR

Electronic transfer - Please quote the course name on your EFT transaction.

ABSA Bank, 160 Jan Smuts Branch Code: 508005 Type of Account: Current Account
Account No.: 4057661908 VAT No. 405 020 6434

OR

Credit card: Visa card Master card AMEX

Please note: Snowden DOES NOT charge a surcharge for credit card payments.

Card no:

Cardholder's name: _____

Expiry date: / Signature: _____

PLEASE NOTE: No refunds for cancellations made within 2 weeks of the course or for 'no shows'. Delegates can be substituted. If the minimum number of delegates is not achieved, delegates will be notified 1 week prior to course start date and fees will be refunded.