

THREE-DAY COURSE & SITE VISIT

Mine Backfill Design & Operation Course

CAPE TOWN, SOUTH AFRICA



7 - 11
SEPTEMBER
2026

BOOK NOW

 **Paterson & Cooke**
KNOWLEDGE | EXPERIENCE | PASSION

Course Introduction

Choosing the right type of backfill is very project specific; constraints such as mine plan, source materials, schedule, cash flow, and regional skills all impact the choice of backfill type and source.

The successful implementation of a backfill system depends on a number of factors. A fundamental understanding of the material properties and geomechanics, balanced process engineering and hydraulic design, safe placement strategies and cost-effective operational management planning are all important for backfill to do its job - support the mining cycle at the lowest cost possible.

Objectives

Participants will gain an appreciation of the requirements for designing and operating a safe, cost-effective and reliable backfill system. The course objectives are to:

- Introduce the fundamental concepts of geomechanics and material properties
- Examine the various elements that go into engineering a backfill system, including testing, plant and process design, reticulation and barricades
- Relate to operational aspects of a backfill system including quality assurance, cost reduction, operational management plans, risk control and new technology

Content & Program

The intensive course consists of 3 days of technical lectures, case studies and laboratory demonstration sessions, followed by a site visit to Khoemacau, Botswana from 10 to 12 September. The course will be delivered in English.

Presenters

The course is presented by Paterson & Cooke senior staff, with contributions from guest speakers. All key lecturers will be available throughout the week to answer questions or delve into deeper discussions. Some highlighted lecturers are:

Bruno Salvoldi *Director, (Civil) Engineer*

Angus Paterson *Director, (Civil) Engineer*

Bernardt van der Spuy *Senior, (Mechanical) Engineer*

Leslie Correia *Senior, (Process) Engineer*

Paul Carmichael *Project, (Mining) Engineer*

Amin Jafari *Project, (Geomechanics) Engineer*

James Wickens *Senior, (Mechanical) Engineer*



Who Should Attend

The course is designed for all professionals involved in backfill applications, including:

- Mining and geotechnical engineers
- Chemical and mineral processing engineers
- Mechanical engineers
- Operational staff
- Project and/or study managers
- Business decision makers
- Government legislators and policy makers

Dates & Location

The course will be held from Monday, September 7th through Friday, September 11th, 2026. The first three days will be held at the Academic Conference Centre, The Breakwater Lodge, Victoria & Alfred Waterfront, Cape Town, South Africa with lab demonstrations at Paterson & Cooke's laboratory.

The optional Khoemacau site visit is planned for 10th to 11th September with the return to Cape Town on the 12th.

Fees & Registration

Space is limited for the site visit and therefore registration for the site visit will be on a first come, first served basis.

Cost for three-day course only = R21 000 per person including VAT.

Cost for three-day course and site visit = R44 000 per person including VAT.

The price includes flights, accommodation, and transport in Botswana.

The sponsor reserves the right to cancel the course or the site visit and return registration fees if enrollment is insufficient.

We will issue an invoice which is payable within 15 days. A cancellation fee of 25% will be charged for written cancellations received before 14 August 2026.

No fees will be refunded under any circumstances for cancellations after this date.

Contact

If you have any queries, please contact Gesa Witte at:
gesa.witte@patersoncooke.com or on Tel: +27 (0) 21 531 2955

Course Agenda

Session	Monday Sept 7	Tuesday Sept 8	Wednesday Sept 9	Khoemacau Site Visit
07:15–08:00	Registration (7:15 - 8:00) Tea / Coffee	Tea / Coffee	Tea / Coffee	Thursday 10th Travel to Site
08:00–10:00	Course Introduction Backfill Overview Backfill Selection Considerations	Key Equipment Selection Plant Design Realisation Plant Design Pitfalls	Backfill Geomechanics Barricades Backfill Placement & Monitoring / Case Study	Friday 11th Site Visit
10:00–10:30	Tea / Coffee Break	Tea / Coffee Break	Tea / Coffee Break	Saturday 12th Return to Cape Town
10:30–12:30	Material Testing Plant Design Principles	Reticulation System Design / Case Study Breakout Session	Quality Control & Reconciliation Case Study Economics & Life Cycle Planning	Details will be communicated to confirmed delegates
12:30–13:30	Lunch	Lunch	Lunch	
13:30–15:00	Lab Demonstrations at P&C Office	Reticulation System Operation / Case Study UDS Installation Case Studies	Backfill System Management & Integration Wrap Up Discussion	
15:00–15:30	Tea / Coffee Break	Tea / Coffee Break	End of 3-Day Course	
15:30–17:00	Lab Demonstrations at P&C Office	Backfill Binders & Admixtures Case Studies		
Evening	Social Function	Evening Free	Evening Free	

Note: The agenda is presented for information purposes only and illustrates the topics that will be covered; adjustments to the schedule or content are not expected but may be required at the organiser's discretion.