



ENGINEERING AND TECHNICAL TRAINING

Quarrying and Aggregate Production

3 day course

Classroom, online or in-house

Course overview

A quarry sells a product defined by grading, shape and cleanliness, and a plant that produces the wrong shape has usually chosen the wrong crusher for the rock rather than run it badly. This course starts with the rock. Delegates work through deposit assessment and the rock properties that determine what can be produced, including hardness, abrasiveness and fines generation. Quarry development and bench design follow. Extraction is covered, with drilling and blasting treated at the level a production supervisor needs to specify a result rather than design a round. Crushing is worked through by stage: jaw, cone, impact and the reduction ratio each achieves, with the shape each produces. Screening is addressed, including media selection, efficiency and carryover. Washing and fines management follow. Product specification and testing are covered against construction standards. Stockpiling and segregation are addressed. The course closes on plant balance, on cost per tonne and on quarry rehabilitation obligations.

What you will learn

- Assess a deposit against the products it can yield
- Develop benches and plan extraction
- Specify a blast result appropriate to the plant feed
- Select crushers by stage for the required reduction and shape
- Screen efficiently and control carryover
- Wash and manage fines
- Test products to standard, balance the plant and cost per tonne

Who should attend

- Quarry managers and production supervisors
- Crushing and screening plant operators
- Materials and quality control staff at quarries
- Purchasers specifying aggregates
- Engineers supervising aggregate supply

Course outline

- 01 The wrong crusher for the rock
- 02 Deposit assessment and rock properties
- 03 Quarry development and bench design
- 04 Extraction and specifying a blast result
- 05 Jaw, cone and impact crushing
- 06 Reduction ratio and particle shape
- 07 Screening, media and efficiency
- 08 Washing, product testing, plant balance and rehabilitation

Upcoming dates



Dates	Venue	Format	Fee per delegate
2 to 4 December 2026	Kampala, Uganda	Classroom	USD 995
13 to 15 January 2027	Accra, Ghana	Classroom	USD 995
1 to 3 February 2027	Casablanca, Morocco	Classroom	USD 995
17 to 19 February 2027	Online	Online	R6,500

Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

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