



MINING AND MINERALS TRAINING

Chrome and Manganese Ore Processing

3 day course

Classroom, online or in-house

Course overview

Chrome and manganese are sold into ferroalloy markets that pay for a ratio and punish contamination, and both are processed from ores where the valuable mineral is dense but not always easy to liberate cleanly. This course covers producing saleable product from each. Delegates work through chromite and manganese mineralogy, including the chrome to iron ratio that determines value and the manganese to iron ratio buyers watch. Comminution to liberation without excessive fines generation is addressed, since fines are where recovery is lost. Gravity concentration is covered through spirals, shaking tables and dense medium, with the circuit configurations used on the Bushveld and elsewhere. Ultra fine chrome recovery is addressed. Magnetic separation for manganese follows. Drying, sizing and lumpy against fines products are covered. Ferroalloy smelting requirements are addressed so operators understand what the customer needs. Tailings retreatment is covered as a real revenue source. The course closes on product specification, sampling and moisture penalties.

What you will learn

- Explain how chrome to iron and manganese to iron ratios set value
- Liberate ore without generating excessive fines
- Configure spiral, table and dense medium gravity circuits
- Recover ultra fine chrome
- Apply magnetic separation to manganese ores
- Produce lumpy and fines products to size specification
- Retreat tailings and manage sampling and moisture penalties

Who should attend

- Metallurgists on chrome and manganese operations
- Plant operators in gravity concentration circuits
- Production supervisors at ferroalloy feed plants
- Quality control and sampling staff
- Commercial staff selling ferroalloy ores

Course outline

- 01 Paid on a ratio, punished on contamination
- 02 Chromite and manganese mineralogy
- 03 Liberation without excessive fines
- 04 Spirals, tables and dense medium
- 05 Ultra fine chrome recovery
- 06 Magnetic separation for manganese
- 07 Drying, sizing, lumpy and fines products
- 08 Ferroalloy requirements, tailings retreatment and penalties

Upcoming dates



Dates	Venue	Format	Fee per delegate
18 to 20 November 2026	Cape Town, South Africa	Classroom	R14,950
14 to 16 December 2026	Johannesburg, South Africa	Classroom	R14,950
27 to 29 January 2027	Online	Online	R6,500
1 to 3 February 2027	Nairobi, Kenya	Classroom	USD 995

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@afiscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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