



MANUFACTURING AND PRODUCTION

Ceramic Tile and Sanitaryware Production

3 day course

Classroom, online or in-house

Course overview

Ceramic products shrink substantially in firing, so every dimension a customer measures was decided by a body recipe and a kiln curve rather than by the mould, and a small change in either shifts the whole size grade. This course covers holding it. Delegates work through raw materials, clay, feldspar, quartz and their role in the fired body, and the body preparation route through wet milling, slip and spray drying. Forming follows across pressing for tiles and casting for sanitaryware, including mould making, plaster life and pressure casting. Drying is addressed with its cracking risks. Glazing is covered: glaze preparation, application by spray, bell and disc, and the fit between glaze and body that determines crazing. Firing follows through roller hearth and tunnel kilns, with firing curves and the reactions in each zone. Size grading, sorting and quality classification are addressed as commercial realities. Defects are diagnosed, including pinholes, crawling and black core. The course closes on kiln energy and on colour and calibre consistency.

What you will learn

- Explain the role of each raw material in the fired body
- Prepare bodies through milling, slip control and spray drying
- Form by pressing and by casting, and manage mould life
- Prepare and apply glaze, and achieve glaze to body fit
- Run firing curves through roller hearth and tunnel kilns
- Grade, sort and classify product commercially
- Diagnose pinholes, crawling and black core, and control kiln energy

Who should attend

- Ceramic plant production supervisors
- Glaze and body technologists
- Quality staff sorting and grading tiles
- Kiln operators in ceramic production
- Plant managers at tile and sanitaryware factories

Course outline

- 01 The kiln decides the dimension
- 02 Raw materials and the fired body
- 03 Milling, slip and spray drying
- 04 Pressing, casting and mould life
- 05 Drying and cracking risk
- 06 Glaze preparation, application and fit
- 07 Roller hearth and tunnel firing
- 08 Grading, defects, kiln energy and calibre consistency

Upcoming dates



Dates	Venue	Format	Fee per delegate
14 to 16 October 2026	Harare, Zimbabwe	Classroom	USD 995
26 to 28 October 2026	Dar es Salaam, Tanzania	Classroom	USD 995
2 to 4 November 2026	Casablanca, Morocco	Classroom	USD 995
10 to 12 February 2027	Mbabane, Eswatini	Classroom	R14,950

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**.

AfriScience Group | +27 61 536 6531 | info@afriScience.co.za | Pretoria, Gauteng, South Africa