



MANUFACTURING AND PRODUCTION

Waterproofing and Bituminous Products Manufacturing

3 day course

Classroom, online or in-house

Course overview

A waterproofing product is bought on price and judged on whether a roof leaks five years later, which is a gap long enough that a manufacturer can sell a poor formulation for years before the market notices. This course covers making products that hold. Delegates work through bitumen grades, oxidation and the polymer modification with styrene butadiene styrene and atactic polypropylene that gives membranes their flexibility and heat resistance. Membrane manufacture follows: carrier selection, compound preparation, coating line operation, surfacing and the thickness control that determines service life. Liquid applied systems are covered across bitumen emulsions, acrylics and polyurethanes. Formulation for adhesion, elongation and ultraviolet resistance is addressed. Testing follows through softening point, penetration, cold flexibility, tensile and artificial weathering. Application requirements are covered so a manufacturer can support installers, including substrate preparation, priming and detailing. Storage and shelf life are addressed. The course closes on failure investigation, on warranty terms and on the difference between a product fault and a workmanship fault.

What you will learn

- Select bitumen grades and apply polymer modification
- Manufacture membranes with controlled carrier, coating and thickness
- Formulate liquid applied emulsion, acrylic and polyurethane systems
- Balance adhesion, elongation and ultraviolet resistance
- Test softening point, penetration, cold flexibility and weathering
- Support installers on substrate preparation, priming and detailing
- Investigate failures and separate product faults from workmanship

Who should attend

- Production supervisors at waterproofing manufacturers
- Formulation chemists in bituminous products
- Quality staff testing membranes and coatings
- Technical sales staff supporting applicators
- Specifiers and contractors selecting waterproofing systems

Course outline

- 01 Judged five years later
- 02 Bitumen grades and oxidation
- 03 Polymer modification and its effect
- 04 Carrier selection and compound preparation
- 05 Coating line, surfacing and thickness control
- 06 Liquid applied emulsion, acrylic and polyurethane systems
- 07 Testing and artificial weathering
- 08 Application support, storage, failures and warranty

Upcoming dates



Dates	Venue	Format	Fee per delegate
23 to 25 November 2026	Johannesburg, South Africa	Classroom	R14,950
6 to 8 January 2027	Online	Online	R6,500
20 to 22 January 2027	Kigali, Rwanda	Classroom	USD 995
25 to 27 January 2027	Gaborone, Botswana	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**.

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