



MANUFACTURING AND PRODUCTION

Food Packaging Technology and Shelf Life

3 day course

Classroom, online or in-house

Course overview

Packaging is chosen on cost per unit and then blamed when the product fails in the market, though the failure is usually a barrier property nobody specified. This course makes the specification deliberate. Delegates work through the deterioration routes a product is actually vulnerable to, whether oxidation, moisture gain or loss, light, microbial growth or physical damage. Barrier properties are covered against those routes, including oxygen and moisture transmission rates and what the numbers mean in practice. Material families are compared: flexible films, rigid plastics, glass, metal and paper based structures. Modified atmosphere and vacuum packaging follow. Sealing integrity is addressed, since most pack failures are seal failures. Labelling and legal requirements are covered. Shelf life determination is treated properly, including accelerated testing and its limits. Sustainability and recyclability are addressed. The course closes on cost, on line compatibility and on investigating a packaging complaint.

What you will learn

- Identify the deterioration routes a specific product faces
- Specify barrier properties against those routes
- Compare flexible, rigid, glass, metal and paper based materials
- Apply modified atmosphere and vacuum packaging
- Verify sealing integrity and diagnose seal failures
- Meet labelling and legal requirements
- Determine shelf life, including the limits of accelerated testing

Who should attend

- Packaging technologists and specifiers
- Quality assurance and product development staff
- Procurement staff buying packaging materials
- Production supervisors running packing lines
- Food manufacturers reviewing packaging costs

Course outline

- 01 Blamed for a property nobody specified
- 02 Deterioration routes by product
- 03 Barrier properties and transmission rates
- 04 Flexible films and rigid plastics
- 05 Glass, metal and paper based structures
- 06 Modified atmosphere and vacuum packaging
- 07 Sealing integrity and seal failures
- 08 Labelling, shelf life testing, sustainability and complaints

Upcoming dates

Dates	Venue	Format	Fee per delegate
25 to 27 November 2026	Maputo, Mozambique	Classroom	USD 995
13 to 15 January 2027	Online	Online	R6,500
27 to 29 January 2027	Kampala, Uganda	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@afriscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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