



MANUFACTURING AND PRODUCTION

Panel Products: Plywood, Particleboard and Fibreboard

3 day course

Classroom, online or in-house

Course overview

Panel products convert low grade wood into a uniform sheet, and the property a customer relies on, that the sheet behaves the same everywhere, is created entirely by resin distribution and press control. This course covers achieving it. Delegates work through raw material preparation for each product: peeling and drying veneer for plywood, chipping and screening for particleboard, and refining fibre for fibreboard. Resin systems are covered across urea formaldehyde, melamine and phenolic, with their moisture resistance and formaldehyde emission. Blending and resin distribution are addressed, since uneven resin gives weak spots that no press setting fixes. Mat forming and density profile follow. Hot pressing is covered in detail: pressure, temperature, time and the degassing that prevents blows and blisters. Sanding, sizing and thickness tolerance are addressed. Testing follows across internal bond, bending strength, thickness swelling and emission. Overlays and lamination are covered. The course closes on press faults, on resin cost and on formaldehyde compliance.

What you will learn

- Prepare veneer, chips or fibre to the quality each product needs
- Select resin systems for moisture resistance and emission class
- Distribute resin evenly through correct blending
- Form mats that give the intended density profile
- Control press pressure, temperature, time and degassing
- Sand and size to thickness tolerance
- Test bond, strength, swelling and emission, and control resin cost

Who should attend

- Panel plant production supervisors
- Press operators and resin blending staff
- Quality staff testing panel products
- Production managers at board mills
- Buyers specifying panel products

Course outline

- 01 Uniformity created by resin and press
- 02 Veneer peeling, chipping and fibre refining
- 03 Urea, melamine and phenolic resins
- 04 Blending and resin distribution
- 05 Mat forming and density profile
- 06 Hot pressing and degassing
- 07 Sanding, sizing and thickness tolerance
- 08 Testing, overlays, press faults and emission compliance

Upcoming dates

Dates	Venue	Format	Fee per delegate
26 to 28 October 2026	Online	Online	R6,500
23 to 25 November 2026	Johannesburg, South Africa	Classroom	R14,950
28 to 30 December 2026	Accra, Ghana	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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