



MANUFACTURING AND PRODUCTION

Precast Concrete Manufacturing and Yard Operations

3 day course

Classroom, online or in-house

Course overview

Precast moves concrete work off the critical path and into a factory, which buys quality and speed and introduces two problems a site never has: getting the element to the site intact and making it fit something built by somebody else. This course covers both. Delegates work through mould design, materials and the tolerance a mould can actually hold through repeated use. Reinforcement and cast in items are addressed, including the fixings that must be positioned exactly. Prestressing is covered for beds and hollow core, including strand stressing, transfer and detensioning. Concrete for precast follows, with early strength, self compacting mixes and the workability that fills a congested mould. Accelerated curing is addressed through steam and heated beds. Demoulding, lifting and handling stresses are covered, since many elements are cracked before they leave the yard. Storage, stacking and transport follow. Erection tolerance and connection design are addressed. The course closes on finish quality and on repairing a damaged element.

What you will learn

- Design moulds that hold tolerance through repeated use
- Position reinforcement, fixings and cast in items accurately
- Run prestressing beds through stressing, transfer and detensioning
- Select concrete for early strength and mould filling
- Apply accelerated curing without damaging the element
- Demould, lift, stack and transport without inducing cracks
- Meet erection tolerance, design connections and repair damage

Who should attend

- Precast yard supervisors and production staff
- Quality staff on precast elements
- Design engineers specifying precast
- Site staff receiving and erecting precast
- Production managers at precast factories

Course outline

- 01 Getting it there intact and making it fit
- 02 Mould design, materials and tolerance
- 03 Reinforcement, fixings and cast in items
- 04 Prestressing beds, transfer and detensioning
- 05 Concrete for early strength and mould filling
- 06 Accelerated curing
- 07 Demoulding, lifting and handling stresses
- 08 Storage, transport, erection tolerance and repair

Upcoming dates



Dates	Venue	Format	Fee per delegate
21 to 23 September 2026	Windhoek, Namibia	Classroom	R14,950
5 to 7 October 2026	Accra, Ghana	Classroom	USD 995
19 to 21 October 2026	Online	Online	R6,500
25 to 27 November 2026	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@afiscience.co.za, or WhatsApp us on **+27 63 479 1136**.

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