



ENGINEERING AND TECHNICAL TRAINING

Green Building and Sustainable Construction

5 day course

Classroom, online or in-house

Course overview

A building consumes energy and water for decades on the strength of decisions taken in a few weeks of design, and most of the cheapest improvements cost nothing at all if they are made early enough. This course covers making them. Delegates work through passive design including orientation, shading and envelope performance, which matter more in this climate than any equipment choice, and daylighting and natural ventilation. Efficient systems for cooling, lighting and hot water follow. Water efficiency and rainwater harvesting are covered. Materials and embodied carbon are addressed honestly, including where certified alternatives are unavailable locally. Certification schemes are explained with what they cost and what they deliver. The course closes on commissioning and on the performance gap between design and operation.

What you will learn

- Apply passive design through orientation, shading and envelope performance
- Use daylighting and natural ventilation effectively in this climate
- Specify efficient cooling, lighting and hot water systems
- Design water efficiency and rainwater harvesting
- Assess materials and embodied carbon with local availability in mind
- Compare certification schemes on cost and benefit
- Commission properly and close the gap between design and operation

Who should attend

- Architects, engineers and design professionals
- Property developers and project managers
- Facilities and building services staff
- Sustainability and energy managers
- Municipal and public sector building staff

Course outline

- 01 Decades of consumption decided in weeks
- 02 Passive design and orientation
- 03 Shading and envelope performance
- 04 Daylighting and natural ventilation
- 05 Efficient cooling, lighting and hot water
- 06 Water efficiency and harvesting
- 07 Materials and embodied carbon
- 08 Certification, commissioning and the performance gap

Upcoming dates

Dates	Venue	Format	Fee per delegate
5 to 9 October 2026	Accra, Ghana	Classroom	USD 1,325
8 to 12 February 2027	Online	Online	R8,500
1 to 5 March 2027	Pretoria, South Africa	Classroom	R19,950
8 to 12 March 2027	Kigali, Rwanda	Classroom	USD 1,325



Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** 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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