



AGRICULTURE AND AGRIBUSINESS

Centre Pivot and Sprinkler Irrigation Operation

3 day course

Classroom, online or in-house

Course overview

A centre pivot applies water at a rate that increases along its length, so the outer span delivers most of the water in the shortest time and is where runoff, wheel rutting and under application all begin. This course works from that geometry. Delegates work through pivot configuration, span layout, and the sprinkler package selection that matches application rate to soil intake rate. Pressure regulation and nozzle sizing follow. Application depth, speed setting and the percentage timer are covered so operators can convert a required depth into a machine setting. Uniformity testing is addressed through catch can evaluation and the coefficient of uniformity. End guns and corner arms are covered with their uniformity penalties. Runoff and soil intake are addressed directly, including the tillage and residue practices that let a pivot apply what it should. Mechanical operation follows: drive trains, alignment, tyres and the safety systems that stop a misaligned machine. Electrical and lightning protection are covered. The course closes on maintenance schedules and on evaluating a poorly performing machine.

What you will learn

- Match sprinkler package application rate to soil intake rate
- Size nozzles and set pressure regulation correctly
- Convert a required application depth into a speed setting
- Evaluate uniformity by catch can testing
- Manage end guns and corner arms and their uniformity penalty
- Control runoff through tillage and residue practice
- Maintain drive trains and alignment, and protect against lightning

Who should attend

- Pivot operators and farm irrigation staff
- Irrigation technicians servicing sprinkler systems
- Farm managers running mechanised irrigation
- Agricultural engineers evaluating machines
- Equipment dealers supporting pivot customers

Course outline

- 01 Most of the water at the outer span
- 02 Pivot configuration and span layout
- 03 Sprinkler packages and application rate
- 04 Nozzle sizing and pressure regulation
- 05 Depth, speed and the percentage timer
- 06 Catch can testing and uniformity
- 07 End guns, corner arms and runoff control
- 08 Drive trains, alignment, lightning protection and maintenance

Upcoming dates

Dates	Venue	Format	Fee per delegate
4 to 6 November 2026	Port Louis, Mauritius	Classroom	USD 995
4 to 6 January 2027	Online	Online	R6,500
18 to 20 January 2027	Durban, South Africa	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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