



ENGINEERING AND TECHNICAL TRAINING

Production Engineering

5 day course

Classroom, online or in-house

Course overview

This course covers the engineering of a manufacturing operation: how a product is made, at what rate, at what cost and to what quality. Delegates work through process selection and planning, tooling and fixture design, line balancing and capacity calculation, work measurement and standard times, layout and material flow, and the cost model that connects an engineering decision to a unit cost. Automation and its justification are covered, along with the practical constraints of manufacturing in African markets, including supply lead times, spares availability and the effect of both on how much automation is sensible.

What you will learn

- Select and plan a manufacturing process for a given product
- Design tooling and fixtures appropriate to the volume
- Balance a line and calculate realistic capacity
- Carry out work measurement and set standard times
- Design layout and material flow
- Connect an engineering decision to unit cost
- Justify automation against volume, cost and supportability

Who should attend

- Production and manufacturing engineers
- Industrial engineers
- Operations managers and supervisors
- Process and quality engineers
- Graduate engineers entering manufacturing

Course outline

- 01 Process selection and planning
- 02 Tooling and fixture design against volume
- 03 Line balancing and capacity calculation
- 04 Work measurement and standard times
- 05 Layout and material flow
- 06 Unit cost modelling
- 07 Automation and its justification
- 08 Supply lead time and supportability constraints

Upcoming dates

Dates	Venue	Format	Fee per delegate
3 to 7 September 2026	Maputo, Mozambique	Classroom	R11,995
18 to 22 September 2026	Lusaka, Zambia	Classroom	R11,995
30 November to 4 December 2026	Lusaka, Zambia	Classroom	R11,995

Fees and how to register

Online **from R6,500** per delegate, classroom **from R11,995** per delegate, 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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