



ENGINEERING AND TECHNICAL TRAINING

Bearings and Mechanical Power Transmission

5 day course

Classroom, online or in-house

Course overview

Most bearings fail long before their calculated life, and the reason is almost always installation, lubrication or contamination rather than the bearing itself. This course covers the whole chain. Delegates work through bearing types and selection, load and life calculation, and the fits, clearances and mounting methods that determine whether a bearing survives fitting. Lubrication and sealing are covered. Failure analysis is taught from the evidence on a removed bearing, which tells you what actually happened. Power transmission follows: couplings, belts, chains and gearboxes, their selection, tensioning and alignment. The course closes on storage and handling, where a surprising share of damage originates.

What you will learn

- Select bearing types and calculate load and expected life
- Apply correct fits, clearances and mounting methods
- Lubricate and seal bearings appropriately for the duty
- Analyse a failed bearing from the evidence on it
- Select and install couplings, belts, chains and gearboxes
- Tension and align transmission components correctly
- Store and handle components without causing damage

Who should attend

- Maintenance technicians, fitters and millwrights
- Reliability and maintenance engineers
- Stores staff handling bearings and components
- Maintenance supervisors
- Design engineers specifying transmission components

Course outline

- 01 Failing long before calculated life
- 02 Bearing types and selection
- 03 Load and life calculation
- 04 Fits, clearances and mounting
- 05 Lubrication and sealing
- 06 Failure analysis from the removed bearing
- 07 Couplings, belts, chains and gearboxes
- 08 Tensioning, alignment, storage and handling

Upcoming dates

Dates	Venue	Format	Fee per delegate
16 to 20 November 2026	Online	Online	R8,500
25 to 29 January 2027	Nairobi, Kenya	Classroom	USD 1,325
1 to 5 March 2027	Johannesburg, South Africa	Classroom	R19,950

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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