



CEMENT MANUFACTURING

Fundamentals of Cement Manufacturing Technology

DURATION

5 days

CONTACT HOURS

30

LEVEL

Foundation

FEE PER DELEGATE

US\$1,500

The whole cement process from quarry to despatch, for people who need the complete picture once.

Cement plants are long, hot and interconnected, and somebody who only knows their own section will keep being surprised by it. This week builds the process end to end: raw materials and quarrying, raw meal preparation, pyroprocessing, clinker, grinding and despatch. It explains why the plant is built the way it is, what each stage is trying to achieve chemically, and where a decision in one area shows up as a problem in another.

Available as classroom, live online, in house.

Who it is for

New process and production engineers, maintenance and electrical staff wanting the process context, laboratory and quality personnel, and commercial or support staff at cement companies.

What you will be able to do

- Follow the process from raw material to bagged product.
- Explain what each stage contributes chemically and physically.
- Name the major equipment and what it is for.
- Relate a problem in one area to its cause in another.
- Use the plant's vocabulary correctly.

The outline

DAY 1

Raw materials

Limestone, clay, corrective materials and their chemistry · Quarrying, crushing and prehomogenisation · Raw mix design and the moduli

DAY 2

Raw meal

Raw grinding systems · Drying, classification and fineness · Blending and homogenisation

DAY 3

Pyroprocessing

Preheater, calciner and kiln · Burning zone and clinker formation · Cooling, and why cooling rate matters

DAY 4

Cement

Clinker, gypsum and additions · Finish grinding and separation · Fineness, strength and setting

DAY 5

The plant as a system

Energy balance in outline · Emissions and dust control · Storage, packing and despatch

What you leave with

- A process flow diagram you have drawn and can explain.
- A mass and energy picture of a typical line.
- A list of the interactions that most often cause trouble.

Published dates

DATES	WHERE	FEE
23 to 27 November 2026	Cairo, Egypt	US\$1,500
30 November 2026 to 4 December 2026	Accra, Ghana	US\$1,500
7 to 11 December 2026	Dubai, United Arab Emirates	US\$1,500
14 to 18 December 2026	Durban, South Africa	R15,000

Fees are per delegate and cover all course materials. Registration fees are arranged by the delegate. Reg

Register or ask a question

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