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COURSE BROCHURE

# Technical Trainer Development Training Course

16 – 20 May 2027
Cairo

# Technical Trainer Development Training Course

**Ref:** 1352_50608 **Date:** 16 – 20 May 2027 **Location:** Cairo **Fees:** 3500 GBP

Technical Trainer Development is a 1-week training course for engineers and technicians who teach equipment operation, maintenance procedures and safety-critical tasks to colleagues, each preparing a Technical Instruction Pack for one real task from their own site. As experienced staff retire and plant grows more automated, organisations depend on in-house experts to pass on hands-on know-how safely. Jupiter Prime Training runs technical trainer development for these instructors.

## Why Technical Trainer Development Matters Now

Three pressures shape this subject. Retiring craft and engineering staff take tacit know-how with them unless colleagues are taught deliberately. Newer equipment, from digital controls to condition monitoring sensors, changes procedures faster than manuals are rewritten. Safety and quality teams want evidence that every operator signed off as competent was actually observed performing the task. A site that develops its technical instructors well cuts start-up errors and incidents; one that leaves experts to teach by telling sees inconsistent practice and repeated rework. The course draws on the Training Within Industry Job Instruction TWI JI method, Bloom's psychomotor domain and the Kirkpatrick four-level model.

## Who Gains Most from Technical Trainer Development

- Those who teach operation of plant, machinery or vehicles
- Those who instruct maintenance and calibration procedures
- Those who induct contractors and new hires on safety-critical tasks
- Those who assess and sign off practical competence
- Those who write or update work instructions and job aids

An operations or maintenance department gains most when several of its senior technicians attend together, because task breakdowns and sign-off criteria then follow one shared format across shifts.

## Technical Trainer Development Capabilities

Participants leave able to break a hands-on task into teachable steps, demonstrate it clearly and judge when a learner can perform it unsupervised.

- Apply hierarchical task analysis to a procedure, separating steps, key points and reasons — work instruction owners
- Design a demonstration-practice sequence matched to the psychomotor stage of the learner — line supervisors
- Build job aids and checklists that support correct performance at the equipment — operators
- Specify observable performance criteria for competency sign-off — safety and quality leads

- Assess a learner's practical performance and record evidence consistently — audit and assurance
- Communicate hazards and critical steps so learners retain them under pressure — site safety

## Key Technical Trainer Development Terms

- Hierarchical task analysis — breaking a job into tasks, sub-tasks and steps so each can be taught, practised and checked in order.
- Key point — a detail within a step that makes or breaks the job, affects safety or makes the step easier to perform.
- Job Instruction method — the four-step TWI approach: prepare the learner, present the job, try out performance, follow up.
- Psychomotor domain — the area of learning about physical skill, progressing from imitation through practice to automatic, precise performance.
- Competency sign-off — a recorded judgement, based on observed performance against criteria, that a person can perform a task unsupervised.
- Job aid — a checklist, diagram or card used at the point of work to prompt correct steps without relying on memory.

## Technical Trainer Development Day by Day

## Day 1: The Expert as Instructor

- Tacit Knowledge Capture From Senior Technicians — What Must Be Taught
- Telling Versus Teaching: Common Expert Blind Spots — Instructor Mindset
- Bloom's Psychomotor Domain Stages — Setting Realistic Skill Targets
- Learner Profiles: Apprentices, Transfers and Contractors — Tailoring Instruction
- Site Hazard Context for Teaching Areas — Safe Instruction Environments

## Day 2: Breaking Down the Task

- Hierarchical Task Analysis Worksheets — Steps, Key Points and Reasons
- Critical Step and Error Trap Identification — Where Learners Go Wrong
- Job Breakdown Sheets for Equipment Procedures — Teaching Sequence
- Learning Objectives for Practical Tasks — Conditions, Actions and Standards
- Job Aid and Checklist Design — Support at the Point of Work

## Day 3: Demonstration and Practice

- TWI Job Instruction Four-Step Method — Structured Hands-On Teaching
- Demonstration Technique at the Equipment — Visibility, Pace and Narration
- Guided Practice and Coaching Prompts — Correcting Without Taking Over
- Simulators, Mock-Ups and Cutaway Models — Practice Before Live Plant
- Explaining Hazards and Controls — Retaining Safety-Critical Steps

## Day 4: On-the-Job Instruction and Sign-Off

- On-the-Job Instruction Plans and Shift Scheduling — Fitting Teaching to Operations
- Observable Performance Criteria — Defining Competent Performance
- Practical Assessment Checklists — Consistent Evidence Across Assessors
- Competency Records and Re-Assessment Intervals — Audit Readiness
- Kirkpatrick Level 3 Follow-Up — Checking Behaviour on the Job

## Day 5: Practising the Technical Instruction Pack

- Task Breakdown of a Participant's Own Procedure — Applying Day 2 Analysis
- Filmed Four-Step Teaching Session — Applying Day 3 Method
- Peer Assessment With Sign-Off Checklist — Applying Day 4 Criteria
- Feedback Debrief on Clarity and Safety Messages — Instructor Improvement
- Technical Instruction Pack — Breakdown, Job Aid, Lesson Steps and Sign-Off Sheet

## Applying Technical Trainer Development After the Course

- Run a hierarchical task analysis with a senior technician on one high-risk procedure and publish the job breakdown sheet.
- Teach the next new starter using the four-step Job Instruction method and record the sign-off against observable criteria.

## Technical Trainer Development Questions FAQ

### What is technical trainer development and why does it matter now?

Technical trainer development equips engineers and technicians to teach hands-on tasks systematically. It matters now because retiring experts, changing equipment and safety assurance demands all require proof that skills are passed on correctly.

### Which roles gain most from technical trainer development?

Senior technicians, maintenance engineers and operators who instruct colleagues gain most. Those who induct contractors, assess practical competence or write work instructions also benefit from the same task breakdown and sign-off methods.

### How does technical trainer development differ from a general train the trainer course?

General train the trainer courses focus on classroom facilitation. Technical trainer development centres on teaching at the equipment: task analysis, demonstration-practice, job aids and competency sign-off for safety-critical procedures.

### What do you bring back from technical trainer development?

You bring back a Technical Instruction Pack for a real task: the job breakdown sheet, a job aid, four-step lesson steps and a competency sign-off sheet, ready for the next new starter.

## Technical Trainer Development: The Way Forward

The Technical Instruction Pack first informs who teaches the chosen procedure and how a learner is signed off. Instructors use it at the equipment, and supervisors use it to schedule practice on shift. After first use, revisit the key points and error traps, since a utility substation and a food packaging line expose different weaknesses.