



## TECHNICAL & OPERATIONAL CAPABILITY DEVELOPMENT PORTFOLIO

Training Solutions for Engineering, Municipal, Industrial & Technical Environments

Effective Human Intervention delivers industrial capability development designed to improve safety, reliability, operational performance, and leadership effectiveness across technical environments.

### TECHNICAL & OPERATIONAL CAPABILITY DEVELOPMENT FRAMEWORK

- Reliability, Maintenance & Asset Performance
- Electrical & Power Systems Excellence
- Automation & Control Systems
- Operational & Manufacturing Excellence
- Project Management & Engineering Skills
- Digital & Future Skills Development
- Leadership & Professional Skills



#### DELIVERY FLEXIBILITY

- ✓ Face-to-face training
- ✓ Virtual learning
- ✓ Hybrid delivery
- ✓ Customised in-house solutions



#### 1. RELIABILITY, MAINTENANCE & ASSET PERFORMANCE

**Focus: improving equipment reliability, uptime, and maintenance effectiveness.**

##### Courses: Maintenance Strategy

- Enterprise Asset Management
- Maintenance Best Practices
- Maintenance Planning & Scheduling (Industry 4.0 / AI)
- Maintenance Planning with AI Augmentation
- Maintenance Risk & Reliability Management
- Reliability Centred Maintenance
- Total Productive Maintenance (TPM)
- Zero Breakdown Maintenance Strategies
- Laser Alignment of Vacuum Pump

##### Mechanical Reliability

- Hydraulics & Pneumatics
- Pump Operation & Maintenance
- Compressor Maintenance
- Gearbox Design, Operation & Maintenance
- Mechanical Systems Fault Finding

##### Material Handling

- Conveyor Systems Fundamentals
- Conveyor Maintenance & Troubleshooting
- Emergency Conveyor Belt Splicing

##### Predictive Maintenance

- Machinery Failure Analysis & Prevention
- Condition Based Monitoring



#### ACCREDITATION & RECOGNITION

- ✓ CPD recognised programs
- ✓ SETA accredited provider
- ✓ Industry-aligned training



#### 2. ELECTRICAL & POWER SYSTEMS EXCELLENCE

**Focus: power system operation, protection, compliance, and electrical reliability.**

##### Courses:

- Advanced Electrical Systems
- Best Practice for Transformer Operation & Maintenance
- Cable Selection, Installation & Fault Finding
- Electrical Fault Analysis
- Fault Level Calculations
- Fundamentals of Power System Protection
- HV Power Transformer Theory
- HV Transformer Maintenance & Oil Testing
- Partial Discharge
- Reading & Understanding Electrical Drawings
- Safety Earthing, Bonding & Lightning
- SANS 10142-1 Ed 3.2
- SANS 10142-2
- Substation Maintenance
- Thermographic Training
- Medium / High Voltage Switching
- MV Switchgear Maintenance
- MV/LV Protection Theory & Applications
- Substation Authorised / Responsible Person
- Maintenance of Electrical Networks (NRS 089)

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## 3. AUTOMATION, CONTROL & INSTRUMENTATION

**Focus: industrial automation and process control systems.**

### Courses:

- AC Variable Speed Drives
- Introduction to Variable Speed Drives
- Master Drives Vector Control Maintenance
- Flow Control for Instrumentation Practitioners
- Profibus Systems Course
- SIMOCODE DP Course
- SIMOCODE PRO Course
- Siemens Step 7 PLC Courses
- Siemens TIA Portal PLC Courses



## 5. PROJECT MANAGEMENT & ENGINEERING MANAGEMENT

**Focus: project planning and execution in technical environments.**

### Courses:

- Project Management for Engineers & Technical Professionals
- Project Management Professional (PMP Prep)
- Microsoft Project (Basic, Intermediate, Advanced)
- MS Project using S-Curve
- MS Project & Excel Integration
- Supercharged MS Project with Power BI
- Primavera P6 Professional



## 4. OPERATIONAL & MANUFACTURING EXCELLENCE

**Focus: operational efficiency, lean manufacturing, quality improvement.**

### Courses:

- 20 Keys to Workplace Improvement
- Lean Manufacturing & Value Stream Mapping
- Lean Practitioner
- Lean Six Sigma (Yellow, Green, Black Belt)
- 5S & Kaizen
- 5 Why & 8D Problem Solving
- FMEA
- Operational Equipment Effectiveness (OEE)
- Root Cause Analysis & Incident Investigation
- RCA using CAPA Plans
- SMED
- Total Quality Management
- Process Approach
- ISO 9001 / 14001 / 45001 etc.
- Problem Analysis & Solving Methods



## 6. DIGITAL PRODUCTIVITY & FUTURE SKILLS

**Focus: modern digital tools and AI-enhanced workplace skills.**

### Courses:

- Super Excel
- Excel (Intro / Intermediate / Advanced)
- Excel PowerPivot & Dashboards
- Power BI
- Microsoft Word (Intro / Intermediate / Advanced)
- Microsoft PowerPoint
- Beyond the Draft: Using AI to build Powerful Technical Reports
- Business Writing using AI
- AI – Copilot
- Finance Automation with Copilot & String AI

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## 7. LEADERSHIP & MANAGEMENT DEVELOPMENT

**Focus:** leadership capability in technical and operational environments.

### Courses:

- Adaptive Leadership for a Changing World
- Assertiveness Skills for Managers
- Conflict Management
- Diversity Management
- First Line Management
- Management Skills for Engineers
- Management Skills for Maintenance Supervisors
- Supervisory Skills
- Construction Supervisor



## 8. PROFESSIONAL COMMUNICATION & WORKPLACE SKILLS

**Focus:** communication, interpersonal effectiveness, and workplace performance.

### Courses:

- Business Communication
- Business Writing
- Emotional Intelligence
- Report Writing
- Scientific Report Writing
- Dealing with Difficult People
- Creative Thinking & Decision Making
- Innovation & Creativity
- Customer Behaviour Styles
- Time & Stress Management
- Anger Management
- Assertiveness & Interpersonal Skills



## 9. SAFETY, COMPLIANCE & REGULATORY TRAINING

**Focus:** legal compliance, risk reduction, and workplace safety.

### Courses:

- Accident & Incident Investigation
- Construction Regulations
- Driven Machine Regulations
- Electrical Installation Regulations
- Electrical Machine Regulations
- General Machine Regulations
- General Safety Regulations
- Hazardous Identification & Risk Assessment (HIRA)
- Isolation & Lockout Procedures
- Legal Liability
- Occupational Health & Safety Act
- Pressure Equipment Regulations & SANS 347
- Site Safety Awareness
- Safe Work Procedures & SOP Documentation
- ORHVS / ORLVS
- SANS329
- Arc Flash Awareness



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