MAGNA SKILLS DEVELOPMENT INSTITUTE

Capacity Building • Professional Training • Organisational Development

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Course Profile Document

Procurement and Supply Chain Management

Facility Maintenance

Prepared as a professional course profile for delegate review, sponsorship approval and organisational training planning.

COURSE CODE	DELIVERY	DURATION	PREPARED FOR
MSD2785	**Online / Face-to-Face**	**Flexible**	**Organisation Approval**

Register for this Course **View Online Course Page**

Course Overview

This Magna Skills offers Facility Maintenance training course begins with the fundamental principles that always apply to ensure safety. The training course then progresses through basic design procedures, inspection, testing and maintenance requirements, concluding with a review of power quality problems that affect the reliability of an installation where high technology interfaces with a supply.

The electrical designer, installer and maintenance team are all expected to provide an installation that is safe, cost effective and reliable throughout its lifetime.

This training course will provide an understanding of:

- The initial assessment of an installation prior to the design
- Selection of protective devices
- Cable sizing and installation
- Inspection and testing procedures
- The maintenance requirements

Course Outcomes

- The safety factors required by national and international standards
- The functional considerations that a designer has to take into account
- How new technology can impact on the design particularly power quality
- Safety requirements during installation, inspection and testing
- Inspection and testing techniques that affect the maintenance requirements
- How to improve productivity by improving the reliability of an installation

Course Outline / Curriculum

Preliminary Design Requirements

The design process requires consideration of the installation requirements with respect to the load characteristics, the circuit arrangements, and the source of supply.

- Building services
- Purpose of an installation
- Cables
- External influences
- Transformers
- Compatibility
- Protective devices
- Maintainability

Design Characteristics

To enable work to begin on any electrical installation a detailed specification is required. This specification will be based on the safety and functional requirements considered in Day 1.

- Electrical safety
- Cable installation
- IEC 60364
- Terminations
- Wiring regulations
- Inspection and testing
- Cable sizing
- Documentation

Designing an Installation

Building on the first two days of the training course this module puts into practice the theories developed.

- Single phase design
- Power quality
- Three phase design
- Cable requirements
- Protective device selection
- Installation method
- Earthing and bonding
- Source of supply

Commissioning and Testing

The requirements for any maintenance routine begin during the design process and continue though installation into operation. In many countries there is also a legal requirement to maintain an installation in a safe condition.

- The need to maintain
- Test results
- What is maintenance
- Documentation
- Introduction to commissioning
- Harmonics
- Inspection
- Earth leakage

Periodic Maintenance

After the initial verification of the safety and function of the installation it is necessary to ensure that safety remains effective throughout the lifetime of the installation.

- Maintenance Planning
- Periodic inspection
- Equipment reliability
- Complex testing
- Categories of system
- Harmonic analysis
- Safety critical
- Records

Target Audience

- Mechanical and Electrical Engineers
- Mechanical and Electrical Technicians
- Electricians
- Maintenance personnel with responsibility for an electrical installation

Key Course Benefits

Work-Ready Skills

Delegates leave with practical tools, templatesand methods they canapply immediately atwork.

Better Institutional Results

The programme supports stronger planning, reporting, compliance, accountability andservice delivery.

Sponsor-Friendly

This document isdesigned to helpsupervisors, HR units andsponsors approve delegate participation quickly.

ProfessionalRecognition

Delegates receivetraining documentationand a certificate ofcompletion aftersuccessful participation.

Our Training Centres & Delivery Options

Magna Skills offers flexible delivery through face-to-face training centres across Africa and beyond, plus Online / E-Learning for delegates who prefer remote participation.

Southern Africa

Practical training destinations with strong travel access and delegate support.

Pretoria, South Africa

Vic Falls, Zimbabwe

Livingstone, Zambia

East Africa

Popular regional centres for government, NGO and donor-funded project teams.

Kigali, Rwanda

Kampala, Uganda

Nairob

Zanzibar, Tanzania

West Africa & Islands

Strategic locations for regional networking and executive capacity building.

Accra, Ghana

Port Louis, Mauritius

International Executive Venue

Premium destination training for senior teams and international delegates.

Dubai, United Arab Emirates

Online / E-Learning

Attend from anywhere through live online, blended or self-paced learning options.

Online, E-Learning

Remote Teams

Flexib

Organisation-Based Training

Magna Skills can also arrange dedicated in-house training for ministries, NGOs and companies.

Onsite

Custom Dates

Group Training

Ready to Nominate Delegates?

Use the links below to register, review the live course page or contact Magna Skills for organisation-based training support.

Register / Apply Online

View Full Course Page

About Magna Skills

Magna Skills Development Institute provides practical capacity building programmes for government departments, NGOs, public institutions, donor-funded projects and private sector professionals across Africa. Our training approach combines expert facilitation, real workplace case studies, practical tools, post-training support and professional documentation that helps organisations strengthen staff performance and service delivery.

Government Training | NGO Capacity Building | Corporate Workshops | Online Learning | Face-to-Face Training | Certifica

Approval & Authorisation Form

This section may be completed by the organisation, department, HR office, finance office or sponsor approving delegate participation. It can be attached to an internal memo, procurement request or training approval submission.

Organisation / Department	
Delegate Name(s)	
Approved Course	Facility Maintenance
Preferred Delivery Mode	☐ Online ☐ Face-to-Face ☐ Organisation-Based Training
Preferred Training Venue / Date	
Estimated Number of Delegates	
Budget / Vote Number	
Contact Person	
Email / Mobile	

Authorised Name _____ Signature / Stamp _____ Date _____