

TRAINING PROSPECTUS

Upskilling for the workplace



Bidvest Facilities Management's multi-skilled, experienced mobile team will do your basic electrical, plumbing, mechanical and general building support on a scheduled weekly, fortnightly or monthly contract.

ABOUT OUR TRAINING

Bidvest Facilities Management's Training Academy provides learners with technical qualifications and softskills training in a variety of disciplines relating to facilities management. Through comprehensive assessment procedures and rigorous training standards, the academy ensures that learners possess the correct level of skill required to excel at their jobs.



Scope

The training is designed to enhance workplace competencies, and courses can be adapted and developed according to employer's requirements upon request.

The training centre has registered skill assessors that assist all Bidvest Facilities Management contracts with the recruitment of technical employees. Our instructors develop assessment instruments according to client needs, and assess their current and potential employees against their respective skills requirements. This service also assists line managers with their skills development plans.

Training is conducted at the Training Academy and includes:

- Workshops
- Certification
- Assessments
- Classroom lectures
- Hands-on skills training



Audience

Programmes are designed for facilities employees with various levels of skill and expertise. Courses range from beginner to advanced professional training.



Certification

Bidvest Facilities Management provides each learner with a certification based on their particular course completed. The certification is accredited by MERSETA (Manufacturing, Engineering and Related Services SETA) as per SAQA Regulation 13.

TRAINING PROGRAMMES

1	Basic generator maintenance
2	Basic carpentry
3	Basic plumbing
4	Building structure maintenance
5	Tiling & glazing
6	Basic hand tools
7	Power tools
8	Arc welding
9	Basic electrical
10	Intermediate electrical
11	Basic electrical motors (direct on line)
12	Intermediate motors (forward reverse)
13	Relay cicuits
15	Electronic systems technician: Level 1: Introduction to the trade Level 2: Work instruction, tool management & planning Level 3: intermediate (Electronic circuitry, electrical and related equipment) Level 4: basic (data networks & wireless communication)
16	HVAC learnership levels 2 to 4
17	Window and split units
18	Safe handling of refrigerants
19	Communication
20	The basics of business Use mathematics to investigate and monitor financial aspects of personal and community life

PROGRAMMES & COURSES

1. Basic generator maintenance

- Calculating required KVA
- Function of generators
- Components of generators
- Mechanical engine parts
- Engine filters
- Engine sensors
- DC Starting batteries
- Components of AC alternator
- Timers, monitors and contactors
- Fail safe alarms
 - ① 5 DAYS
 - RADE 12 & RELAY LOGIC TRAINING

2. Basic carpentry

- Health & safety at the workplace
- Safe & correct use and care of hand tools (carpentry related)
- Principles of measuring and marking-out (carpentry related)
- Build a wooden door and door frame according to specifications
- · Fit butt hinges to the frame and door
- Fit a wooden door to a wooden frame
- Fit a mortise lock into a wooden door
- Prepare and paint / varnish the wooden door and frame
 - ① 5 DAYS
 - RADE 10 OR ABET LEVEL 4

3. Building plumbing

- Plumbing pipework & diagrams
- Common plumbing problems and solutions
- Waste system venting
- Geysers
- Geyser installation
- Common water heating problems and solutions
- Replacing a geyser element & thermostat
- Plumbing fixtures maintenance & repair
- Compression type faucet
- Rotating ball type faucet
- Ceramic disc type faucet
- Toilet cisterns
- Flush-master, flush valves
- Calculate copper tubing lengths according to specifications
- Join copper tubing by means of soft solder
- Pressure test work piece for water leaks

- ① 5 DAYS
- RADE 10 OR ABET LEVEL 4



4. Building structure maintenance

- Repair and finish
- various types of plaster damage
- various sizes of holes in a masonry wall
- Fit various fixtures to a masonry wall, using various types of fasteners
- Painting

- Perform rust treatment on steel and galvanized metal
- Prepare and paint steel surfaces
- Prepare and paint / varnish interior and exterior wood surfaces
- Prepare and paint interior and exterior plastered walls

- ① 5 DAYS
- GRADE 10 OR ABET LEVEL 4

5. Tiling & glazing

- Plan, prepare and tile wooden and / or plastered surfaces
- Remove and replace broken floor and wall tiles
- Remove broken window glass from a window frame
- Cut window glass according to specifications
- Prepare and glaze a steel window
- ① 5 DAYS
- GRADE 12 & RELAY LOGIC TRAINING

6. Basic hand tools

- Identify the use and care of various types of hand tools
- Make various working drawings according to specifications
- Demonstrate the principles of measuring and markingout
- Perform the following functions on a mild steel work piece:
- Marking-out
- Hack sawing
- Filing
- Drilling
- Tapping
- Finishing

- ① 5 DAYS
- GRADE 12 & RELAY LOGIC TRAINING
- □ BIDVEST FM CERTIFICATE

7. Power tools

- Identify the use and care of various types of power tools
- Interpretation of various working drawings according to specifications
- Safe handling and protective wear
- Specific safety precautions
- Correct and safe handling of following power tools and respective accessories:
 - Drilling machines
- Angle grinders
- Jig saw
- Plainer
- Circular saw
- Cut-off machines

① 5 DAYS

GRADE 12 & RELAY LOGIC TRAINING

BIDVEST FM CERTIFICATE

8. Arc welding

- Identify
 - electric AC and DC arc welding equipment
 - and inspect welding equipment and PPE for suitability and safety
 - and execute all safety precautions
 - arc welding variables
 - and demonstrate different arc welding joints and positions
- Perform
 - arc welding tasks according to specifications
 - quality inspection on arc welding joints
 - ① 5 DAYS
 - **GRADE 12 & RELAY LOGIC TRAINING**

9. Basic electrical

- Health & safety at the workplace
- Safe & correct use and care of hand tools (electrical tools)
- Principles of measuring and marking-out (electrical tasks)
- Understand
 - the operation, load requirements, types, sizes and selection of domestic distribution board accessories (theoretical)
 - the types and symbols of switches used in domestic light circuits
- Draw the wiring diagrams for the different types of light circuits
- Learn how to bend and install PVC conduit according to a plan
- Install and wire domestic light circuits and plug circuits according to work specifications and statutory requirements
- Wiring a basic household distribution board according to work specifications and statutory requirements
 - ① 5 DAYS
 - RELAY LOGIC TRAINING
 - BIDVEST FM CERTIFICATE

10. Intermediate electrical

- Health & safety at the workplace
- Safe & correct use and care of hand tools (electrical tools)
- Principles of measuring and marking-out (electrical tasks)
- Understand
 - the operation, load requirements, types, sizes and selection of
 - 3 Phase distribution board and accessories (theoretical)
 - the types and symbols of switches used in 3
 Phase circuits
- Draw the wiring diagrams for the different types of light circuits
- Learn how to
 - bend and install steel conduit pipe according to a plan
 - make off various types of cable products
- Install and wire domestic light circuits and plug circuits according to work specifications and statutory requirements
- Wiring a basic 3 Phase distribution board according to work specifications and statutory requirements



11. Basic electrical motors (direct on line)

- Construction of motors and the connection of motors
- Explain the construction, symbol, operation, colour and connection of
 - indication devices used in electrical control circuits
 - push buttons used in electrical control circuits
- Explain the construction, symbol, operation and connection of:
 - switches used in electrical control circuits
 - relays used in electrical control circuits
 - contactors used in electrical control circuits
 - delay timers used in electrical control circuits
 - single-phase motors
- · Wire single-phase direct on motor starters
- Wire 3 phase direct on motor starters
- Fault find on direct on line motor circuits
 - ① 5 DAYS
 - GRADE 10 OR ABET LEVEL 4

13. Relay circuits

- Construction of relay circuits
- Explain the construction, symbol, operation, colour and connection of
 - indication devices used in relay control circuits
 - push buttons used in relay control circuits
- Explain the construction, symbol, operation and connection of
 - switches used in electrical control circuits
 - relays used in electrical control circuits
- contactors used in electrical control circuits
- delay timers used in electrical control circuits
- Wire various relay logic panels
- Fault find on relay logic panels
- ① 5 DAYS
- GRADE 10 OR ABET LEVEL 4
- BIDVEST FM CERTIFICATE

12. Intermediate motors (forward reverse)

- Construction of motors and the connection of motors
- Explain the construction, symbol, operation, colour and connection of
 - indication devices used in electrical control circuits
 - push buttons used in electrical control circuits
- Explain the construction, symbol, operation and connection of
 - switches used in electrical control circuits
 - relays used in electrical control circuits
 - contactors used in electrical control circuits
 - delay timers used in electrical control circuits
 - 3 Phase motors
- Wire single phase Star Delta motor starters
- Wire 3 phase Star Delta motor starters
- Fault find on Star Delta motor circuits
 - ① 5 DAYS
 - RADE 10 OR ABET LEVEL 4
 - BIDVEST FM CERTIFICATE





14. Electronic systems technician

Level 1: Introduction to the trade

- Introduction to the trade
- Construction materials and methods for installations
- Pathways and spaces regulations
- Type of fasteners and anchors required to perform installation
- General job-site safety

- Basic trade related mathematics
- Understand the use of low voltage cabling in the work area
- Practical A soldering / crimping and connecting of network cabling
- ① 5 DAYS
- GRADE 10 OR ABET LEVEL 4
- BIDVEST FM CERTIFICATE

16. Level 2 Intermediate

Electronic circuitry, electrical & related equipment

- Introduction to Electrical
 - Basic electronic
 - DC circuits, AC circuits
 - Semiconductors and integrated circuits
 - Basic test equipment
 - Power quality and grounding switching devices and timers (electrical relay logics)
 - Wire and cable terminations (electrical intermediate steel piping / cabling)

- Introduction to codes and Standards
- SIADSA Bylaws
- SANS
- Computer applications
- Basic applications
- Practical C
 - Building of a simple circuits combination of practical A & B with C

- ① 10 DAYS
- GRADE 12 & RELAY LOGIC TRAINING

15. Electronic systems technician

Level 1: Work instruction, tool management & planning

- Building regulations job-site safety
- Scope interpretation
- ID scope
- Context of work
- Job requirement
- Site orientation
- Inspection of site / installation area

- Work planning
- Use of resources / material / tools
- Practical B
- Hand bending of conduit
- Combining practical A & B

- ① 10 DAYS
- GRADE 10 OR ABET LEVEL 4
- BIDVEST FM CERTIFICATE

17. Level 3 basic

Data networks & wireless communication

- Theory
 - Cable selection
 - Structure of cables
 - Buses and networks and rack systems
 - Fibre optics
 - Video systems
 - Wireless communications
 - Site survey project planning and documentation

- Documentation structuring
 - Maintenance and repairs
 - Orientation to the job
 - Leadership skills (team leader)
 - Health and safety
 - Project control (working with team members)
- Practical D Network installation (photo evidence)

- ① 10 DAYS
- GRADE 12 & RELAY LOGIC

18. HVAC learnershipLevels 2 to 4

- Full theoretical training program for HVAC technicians
 - ① 1 YEAR
 - RADE 12 & RELAY LOGIC TRAINING

19. Window & split units

- Basic HVAC training on the maintenance of window units
 - ① 5 DAYS
 - RADE 12 & RELAY LOGIC TRAINING
 - BIDVEST FM CERTIFICATE

20. Safe handling of refrigerants

- Statutory training for all employees working with air-conditioning & refrigerant gasses
 - ① 5 DAYS
 - GRADE 12 & RELAY LOGIC TRAINING

21. Communication

- Understanding
 - what good communication is
 - the communication process
 - the types of communication
- Characteristics of
 - a good sender
 - a good receiver
- Dealing with diversity in the work group
- Overcoming barriers to communication using
 - your voice effectively in communication
 - questions to get clarity
 - Technical language
- Giving information
- Packaging the message
- Making basic presentations
 - ① 5 DAYS
 - RADE 10 OR ABET LEVEL 4

22. The basics of business

- What is a business?
- Identify the key business factors
- Understanding
 - who the stakeholders are that influence our business
 - the work of management
 - how money works in the business

- our markets
- the contribution of our people
- productivity
- Managing
 - our capital assets
 - our raw material
 - our services
- Generating profits

- ① 5 DAYS
- GRADE 10 OR ABET LEVEL 4
- BIDVEST FM CERTIFICATE

23. Use mathematics to investigate and monitor financial aspects of personal and community life

- Understanding
 - money and how it works
 - the basic principles of budgeting
 - the principles of control
 - the concept of interest
- Using tools to calculate interest
- Creating a financial plan to make financial decisions
- ① 5 DAYS
- GRADE 10 OR ABET LEVEL 4





Assumptions and Dependencies

- Bidvest Facilities Management will provide the required facilities and equipment to conduct the training.
- Learners or their employers will be responsible for transport to and from the academy.

OUR RANGE OF SERVICES:

Bidvest Facilities Management is one of the largest Facilities Management solutions companies in southern Africa. The company currently provides various customized Facilities Management services for approximately 50 000 sites across 23 million square metres of space throughout South Africa.

Founded in 2000. Bidvest Facilities Management is a majority black-owned (Level 2 B-BBEE) empowered supplier and has the following accreditation:

ISO 9001 Quality Management; OHSAS 18001 Health & Safety Management and ISO 14001 **Environment Management.**



Integrated Facilities Management



Bundled Soft Services



Business Support Services



Technical Services



Specialised Services









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🔯 sales@bidvestfm.co.za 📞 (012) 641-8000 🎧 www.bidvestfacilitiesmanagement.co.za

