

Occupational Certificate

Welder Level 4

360 Credits

Certification Body

Quality Council for Trade and Occupations

(QCTO)

Course Details / outline

Rationale

Of specific importance is the fact that this qualification elevates training of Welders in South Africa to accepted international standards. The availability of this Welding qualification for training of trades persons to accepted international standards is regarded as an important resource to support national artisan development initiatives in South Africa.

The qualification ensures that a sound skills base is developed at artisan level that can serve as the foundation for achieving coded welding status required for the execution of specialized welds by industry.

Entry requirements

Learners who want to register for this qualification must have the following;

- Grade 9 or its equivalent

Duration

1.5 years (18 Months)

Career options

1. Welder Fabricator
2. Structural Welder
3. Pipe Welder
4. Welding Supervisor

Course Outline

This course is made up of the following compulsory knowledge, practical skills and workplace modules:

Knowledge Modules:

- Introduction to the welding trade
- Occupational Safety, Health and Environmental Protection, NQF Level 2 (4 credits)
- Welding schematics, calculations, welds and welded joints, NQF Level 2 (6 credits)
- Weld imperfections, NQF Level 2 (2 credits)
- Cutting and gouging, NQF Level 2 (2 credits)
- Welding consumable classification and handling,
- Metals and weldability of metals, NQF Level 3 (8 credits)
- Fusion welding, NQF Level 3 (6 credits)
- Arc welding, NQF Level 3 (8 credits)
- Gas welding and cutting, NQF Level 3 (4 credits)
- Welding codes, standards and parameters,
- Shrinkage, residual stress and distortion
- Manual Metal Arc (MMA) welding process
- The Metal Inert Gas/Metal Active Gas/Flux Cored Arc (MIG/MAG/FCAW) welding process, Manual Metal Arc (MMA) welding process
- Welding inspection and quality, NQF Level 4 (4 credits)

Practical Modules:

- Fabricate simple components or work pieces
- Cut, gouge and gas weld material manually
- Perform fillet welds using the Shielded Metal Arc Welding
- Perform fillet welds using the Gas Metal Arc Welding
- Perform fillet welds using the Gas Tungsten Arc Welding
- Perform plate butt welds using the Shielded Metal Arc
- Perform plate butt welds using the Gas Metal Arc
- Perform plate butt welds using the Gas Tungsten Arc
- Perform pipe welds using the Gas Metal Arc Welding
- Perform pipe welds using the Gas Tungsten Arc Welding

Workplace Modules:

- Cut and gouge a range of materials in the workplace,
- Produce a range of fillet welds using various welding processes in a workplace, NQF Level 4 (40)
- Care for, control and handle consumables and materials
- Produce a range of plate welds using various welding processes in a workplace, NQF Level 4 (40)
- Team work, communication and reporting in the
- Produce a range of pipe welds using various welding processes in a workplace, NQF Level 4 (52)

Course fees structure

1. Registration	R1 000.00
2. Deposit fees	R1 500.00
3. Monthly Fees	R1 500.00 * 18 Months
Total Course fees	R29 500.00 (Tuition only)

COLLEGE BANKING DETAILS

NB: All deposit slips must be submitted to the college for recording

NEDBANK

MBOWA COLLEGE

Account No: **1169745628**

CURRENT ACCOUNT

Ref: Student Surname and Name

CAPITEC BANK

MBOWA COLLEGE

Account No: **1052821537**

CAPITEC BUSINESS ACCOUNT

Ref: Student Surname and Name



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