

### SHUKELA TRAINING CENTRE

31 Sugar Mill Way, Mount Edgecombe, 4300 P.O. Box 23, Mount Edgecombe, 4300 Telephone: +27 31 508 7700

Facsimile: +27 31 502 3520 Website: www.sasa.org.za

COURSE TITLE : WELDER PHASE 1

**COURSE DURATION**: 10 WEEKS

**TARGET POPULATION**: 1st year Apprentice Plater/Welder with a suggested

minimum educational level of Standard 8 with

Mathematics and Science.

### **COURSE CONTENT**:

- Induction to Shukela Training Centre
- Identify and interpret Engineering Drawings.
- Identify Engineering Materials and their treatment.
- Identify Basic Hand and measuring Tools and their uses.
- Identify Profiles, Plates and prepare a Material List.
- Identify Workshop equipment and its uses.
- Apply Basic Hand Skills.
- Identify Arc and gas Welding Equipment.
- Apply fundamentals of Arc Welding.
- Apply fundamentals of Gas Welding and Brazing.
- Apply fundamentals of Gas Cutting.
- Draw geometric constructions and apply Marking off techniques.
- Lift and move equipment (Rigging).



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**COURSE TITLE** : WELDER PHASE 2

**COURSE DURATION**: 5 WEEKS

TARGET POPULATION: 2nd year Apprentices who have successfully completed

the Phase 1 Apprentice Welding course or have been

recommended for this course as a result of an Assessment test conducted at this Centre.

## **COURSE CONTENT**:

- Weld metal using arc welding equipment.
- Weld metal using gas welding equipment.
- Weld metal using MIG equipment.
- Weld metal using TIG equipment.
- Apply special welding processes.
- Apply special cutting processes.
- Weld pipes –TIG root run MMAW fill and cap



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**COURSE TITLE**: WELDER PHASE 3

**COURSE DURATION**: 6 WEEKS

**TARGET POPULATION**: 3rd and 4th year Apprentices who have completed the

Phase 2 Apprentice Welders course or an assessment conducted at this centre and are eligible to attempt the

National Trade Test.

# **COURSE CONTENT**:

- Gas Metal Arc Welding butt welds
- Gas Metal Arc Welding fillet welds
- Shielded metal arc welding butt welds
- Shielded metal arc welding fillet welds
- Oxy /acetylene gas welding butt welds
- Oxy /acetylene gas welding fillet welds
- Oxy /acetylene brazing 1G butt weld
- Aluminium welding (GTAW)
- Pipe welding GTAW 2" pipe roll weld
- Pipe welding GTAW / MMAW 6G