**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).

**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

**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