

TRAINING SCHEDULE

TRADE: WELDER

CODE	OBJECTIVES	CRITERIA
ID1	Recall applicable sections of the Manpower Training Act (No 56, 1981) with special reference to discipline and legal responsibilities.	Pass a questionnaire with at least 80%.
ID2	Recall terms and conditions of apprenticeship as Gazetted 26 July 1991.	Pass a questionnaire with at least 80%.
ID3	Recall applicable grievance procedures.	Pass a questionnaire with at least 80%.
ID4	Recall applicable disciplinary procedures.	Pass a questionnaire with at least 80%.
ID5	Recall company rules and procedures.	Pass a questionnaire with at least 80%.
ID6	Recall quality assurance procedures.	Correct according to company standards procedures with a minimum of 5 question pass.
SF1	Recall relevant regulations of the following Acts: (where applicable) - Occupational Health and Safety Act (No 85, 1993). - Minerals Act and Regulations (No 50, 1991).	Pass a questionnaire with at least 80%.
SF2	Attend a standard industrial safety course.	Obtain a recognised certificate.

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	SF3	Recall all safety in welding and oxygen - fuel gas cutting. NB to be conducted in relation to the following modules: 1. Oxygen - fuel gas welding and brazing. 2. Oxygen fuel gas cutting. 3. Shielded metal arc welding (manual metal arc welding) 4. Gas metal arc welding. 5. Gas tungsten arc welding. 6. Other welding processes utilised by the company.	All safety aspects correct according to we oxygen - fuel gas cutting processes utilised company.
	SF4	Attend a first aid course.	Obtain a recognised certificate 1st level.
	SF5	Identify relevant colour coding and symbolic safety signs.	100% as per SABS 0140 and SABS 118
	SF6	Identify relevant colour codes for compressed gas cylinders.	100% correct.
WORKSHOP	HT1	Identify measuring, cutting, marking and fastening tools.	Correctly identify all tools, stating their function.
	HT2	Use measuring, cutting, marking and fastening tools.	100% correct functional application for each tool.
	HT3	Maintain measuring, cutting, marking and fastening tools.	All tools clean and in a safe and functional condition.

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	HT4	Identify, use and maintain hand tools applicable to the trade.	<ol style="list-style-type: none"> 1. Correctly identify all tools; stating their use. 2. 100% correct; functional application for use. 3. All tools clean and in a safe functional condition. 4. All safety aspects adhered to.
	WT1	Use fixed and portable drilling machines. NB to be conducted in relation to module HS3 - sharpening drills.	Correct speeds and feeds to be used. Re metal.
	WT2	Use fixed and portable grinding machines. NB to be conducted in relation to module WT22 - dress a grinding wheel.	All safety aspects adhered to.
	WT22	Dress a grinding wheel.	<ol style="list-style-type: none"> 1. Wheel must be concentric. 2. All safety aspects adhered to.
	HS3	Sharpen drills.	<ol style="list-style-type: none"> 1. Angle according to relevant metal to be used. 2. All safety aspects adhered to.
S	MA1	Recall terms, definitions and use of materials applicable to the trade with special reference to : <ul style="list-style-type: none"> <input type="checkbox"/> Sheet metal <input type="checkbox"/> Plate <input type="checkbox"/> Tubes <input type="checkbox"/> Pipes <input type="checkbox"/> Rolled sections <input type="checkbox"/> Hollow sections 	Minimum of 20 questions with at least 80% correct
	MA2	Recall properties of metals and explain the purpose for using specified metals.	Minimum of 15 questions with at least 80% correct

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	MA3	Identify ferrous and non-ferrous metals with special reference to: <input type="checkbox"/> Steel <input type="checkbox"/> Brass <input type="checkbox"/> Copper <input type="checkbox"/> Aluminium	Each type of material correctly identified.
	MA4	Recall and identify current identification systems utilised by the company; with special reference to: <input type="checkbox"/> identification number <input type="checkbox"/> colour coding	<ol style="list-style-type: none"> 100% correct to current identification utilised within the company. 100% correct accordance with relevant coding charts utilised within the company.
	MA5	Identify metal defects visually.	Each type of defect correctly identified.
S AND S	DS1	Recall terms and definitions pertaining to engineering drawings.	Minimum of 15 questions with 100% pass
	DS2	Read and Interpret relevant symbols abbreviations, tolerances and welding symbols.	Minimum of 20 questions with 100% pass to SABS 044 Part 2, including American symbols (AWS) and British standard welding symbols (BS).
	DS3	Use drawing instruments to produce basic engineering drawings and sketches. Including the use of welding symbols.	100% correct in relation to SABS 044 Part 0111 including standard welding symbols and British standard welding symbols.
	DS4	Read and interpret engineering drawings in order to compile material lists.	All terms, definitions and specifications to be correctly identified and all relevant detail and dimensions present for manufacture.

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LAYOUTS AND MARK OFF	MT1	Lay out and mark off work pieces and positions from drawings, including template work on plate.	Maximum accumulative tolerance of 0,5mm above 1 metre and 1,00mm above 1 metre.
	MT2	Lay out and mark off work pieces and positions from drawings on rolled sections.	Maximum accumulative tolerance of 0,5mm above 1 metre and 1,00mm above 1 metre.
	MT3	Lay out and mark off work pieces and positions from drawings on pipes, tubes and hollow sections.	Maximum accumulative tolerance of 0,5mm above 1 metre and 1,00mm above 1 metre.
THEORY	TA1	Recall the effects of heat input whilst welding and gas cutting with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> expansion <input type="checkbox"/> contraction and explain the method to prevent or rectify the effects of expansion and contraction.	Minimum of 10 questions with at least 80% correct
PRACTISING	BG2	Recall overhead crane hand signals.	100% correct according to recognised code
	BG3	Demonstrate overhead crane hand signals.	100% correct according to recognised code
	BG4	Use the following equipment <ul style="list-style-type: none"> <input type="checkbox"/> chain block <input type="checkbox"/> coffering block <input type="checkbox"/> shackles <input type="checkbox"/> chain slings <input type="checkbox"/> wire rope slings <input type="checkbox"/> tirlfors 	<ol style="list-style-type: none"> 1. Working load not to exceed equipment loading capacity. 2. 100% correct method of slings 3. No damage to equipment. 4. No kinks or twist in chain, wire rope or slings.

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RELATED	TRS1	Operate a guillotine.	1. Adjust guillotine 100% correct according to company's cutting specifications. 2. All safety aspects adhered to.
	TRS2	Operate a power saw.	1. Adjust power saw 100% correct according to company's cutting specifications. 2. All safety aspects adhered to.
GAS AND	GW1	Recall the equipment used in oxygen-fuel gas welding and brazing and explain their use with special reference to: <input type="checkbox"/> gas cylinders <input type="checkbox"/> regulators <input type="checkbox"/> hoses and connections <input type="checkbox"/> torch <input type="checkbox"/> welding tips <input type="checkbox"/> filler rods <input type="checkbox"/> welding goggles, spark lighter and nozzle cleaners.	Minimum 20 questions with 100% pass.
	GW2	Identify and set up oxygen-fuel gas welding and brazing equipment, including starting up and closing down procedures with special reference to: <input type="checkbox"/> gas cylinders <input type="checkbox"/> gas connections <input type="checkbox"/> regulators <input type="checkbox"/> torch <input type="checkbox"/> welding tips <input type="checkbox"/> spanners and cylinder key <input type="checkbox"/> flash back arrestor	1. Correct according to suppliers instructions. 2. All safety aspects adhered to.

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GW3	Select and examine relevant gas welding filler rods, for correct application.	<ol style="list-style-type: none"> 1. 100% correct as per suppliers specifications. 2. 100% correct according to company's sheets.
GW4	Prepare material and equipment for gas welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> weld joint preparation <input type="checkbox"/> parent metal <input type="checkbox"/> filler rods <input type="checkbox"/> fluxes <input type="checkbox"/> direction of welding <input type="checkbox"/> gas pressures <input type="checkbox"/> position for welding <input type="checkbox"/> size of welding tip <input type="checkbox"/> pre and post heating <input type="checkbox"/> flame setting <input type="checkbox"/> tolerances and finishes 	<ol style="list-style-type: none"> 1. 100% correct to company welding procedure welding data sheets. 2. All safety aspects adhered to.
GW5	Identify oxygen-fuel gas welding defects and explain the causes including how to rectify defects.	Minimum of 10 questions with 100% pass
GW6	Weld steel sheet and plate in the following positions using oxygen-fuel gas welding techniques: <ul style="list-style-type: none"> <input type="checkbox"/> flat : square butt <input type="checkbox"/> horizontal : square butt <input type="checkbox"/> vertical : square butt, "T" joint <input type="checkbox"/> horizontal - vertical : "T" joint, corner joint 	<ol style="list-style-type: none"> 1. Tested according to company's current welding practices. 2. All safety aspects adhered to.
GW7	Weld steel pipes in the following positions using oxygen fuel gas welding techniques : <ul style="list-style-type: none"> <input type="checkbox"/> flat : single "V" butt <input type="checkbox"/> horizontal : single "V" butt <input type="checkbox"/> 6 G position 	<ol style="list-style-type: none"> 1. Tested according to company's current welding practices. 2. All safety aspects adhered to. 3. $\pm 5^\circ$ on axis.

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	GW8	Identify oxygen-fuel gas brazing defects and explain their causes including how to rectify defects.	Minimum of 10 questions with 100% pass
	GW9	Braze sheet and plate in the following positions using oxygen-fuel gas brazing techniques : <input type="checkbox"/> flat : square butt <input type="checkbox"/> horizontal - vertical : "T" joint	<ol style="list-style-type: none"> 1. Tested according to company's current welding practices. 2. All safety aspects adhered to.
	GW10	Maintenance of oxygen-fuel gas equipment with special reference to: <input type="checkbox"/> blowpipes <input type="checkbox"/> torches <input type="checkbox"/> rubber hoses <input type="checkbox"/> gas connections <input type="checkbox"/> regulators <input type="checkbox"/> cylinders <input type="checkbox"/> flash back arrestor	<ol style="list-style-type: none"> 1. 100% correct to suppliers instructions 2. All equipment clean and in a safe functional working condition. 3. All safety aspects adhered to.
FUEL GAS	GC1	Recall the equipment used in oxygen-fuel gas and explain their uses with special reference to: <input type="checkbox"/> gas cylinder <input type="checkbox"/> regulators <input type="checkbox"/> hoses and connections <input type="checkbox"/> torch <input type="checkbox"/> nozzles <input type="checkbox"/> spanners and cylinder keys <input type="checkbox"/> welding goggles spark lighter and nozzle cleaners <input type="checkbox"/> flash back arrestor	Minimum of 20 questions with 100% pass

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CODE	OBJECTIVES	CRITERIA
GC2	Identify and assemble oxygen-fuel gas cutting equipment with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinders <input type="checkbox"/> regulators <input type="checkbox"/> hoses <input type="checkbox"/> torch <input type="checkbox"/> nozzles <input type="checkbox"/> flash back arrestor 	1. 100% correct to suppliers instructions 2. All safety aspects adhered to.
GC3	Select cutting nozzles and set gas pressures for cutting different thicknesses of steel.	1. 100% correct to suppliers instructions 2. All safety aspects adhered to.
GC4	Hand cut plates, pipes and rolled sections to straight line and curves with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> tolerance <input type="checkbox"/> finishes 	1. 100% correct to company's quality sta 2. Within 2mm deviation from line over 3 3. All safety aspects adhered to.
GC5	Bevel plate and pipes with gas cutting torch for welding preparation with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> tolerances <input type="checkbox"/> finishes 	1. 100% correct to company's quality sta 2. Within 1° on angle and within 2mm or 3. All safety aspects adhered to.
GC6	Assemble and operate profile and straight line gas cutting machines with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> tolerances <input type="checkbox"/> finishes 	1. 100% correct to company's quality sta 2. 100% correct to suppliers instructions 3. All safety aspects adhered to.
GC7	Maintenance of oxygen-fuel gas cutting equipment with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinder <input type="checkbox"/> regulators <input type="checkbox"/> hoses and connections <input type="checkbox"/> torch <input type="checkbox"/> nozzles <input type="checkbox"/> flash back arrestors 	1. 100% correct to suppliers instructions 2. All equipment clean and in a safe fun working condition. 3. All safety aspects adhered to.

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METAL ARC (MANUAL C WELDING)	AW1	Recall the equipment used in shielded metal arc welding and explain their use with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> Power source AC and DC machines <input type="checkbox"/> Welding cables and connections <input type="checkbox"/> Electrode holder <input type="checkbox"/> Consumable covered electrodes <input type="checkbox"/> Protective clothing and equipment 	Minimum of 20 questions with 100% pass
	AW2	Identify and set up and AC and DC welding machines including starting up and closing down procedures; with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> power source - AC and DC machines <input type="checkbox"/> welding cables and connections <input type="checkbox"/> electrode holder 	1. 100% correct according to suppliers i 2. All safety aspects adhered to.
	AW3	Select and examine relevant welding electrodes.	1. 100% correct according to the supplie system as stated on the electrode box 2. 100% correct as per company's weldi sheets.
	AW4	Prepare material and equipment for shielded metal arc welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> welded joint preparation <input type="checkbox"/> amperage setting <input type="checkbox"/> position for welding <input type="checkbox"/> relevant welding electrodes <input type="checkbox"/> pre and post heat treatment <input type="checkbox"/> interpass temperatures <input type="checkbox"/> tolerances finishes 	1. 100% correct as per company's weldi sheets. 2. All safety aspects adhered to.

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AW5	Identify shielded metal arc welding defects and explain their causes including how to rectify defects with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> undercut <input type="checkbox"/> surface porosity <input type="checkbox"/> incomplete penetration <input type="checkbox"/> excessive penetration <input type="checkbox"/> uneven weld bead <input type="checkbox"/> excessive weld cap <input type="checkbox"/> overlap <input type="checkbox"/> stop-start craters <input type="checkbox"/> splatter <input type="checkbox"/> root concavity <input type="checkbox"/> distortion 	Minimum of 10 questions with 100% pass
AW6	Recall information on welding data sheets as applicable to shielded metal arc welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> parent metal type <input type="checkbox"/> electrode size and type <input type="checkbox"/> amperage settings <input type="checkbox"/> pre and post heat treatment <input type="checkbox"/> interpass temperatures <input type="checkbox"/> joint design, shape and size <input type="checkbox"/> back grinding or back gouging information <input type="checkbox"/> tolerances and finishes 	100% correct according to information on welding data sheets.
AW7	Weld steel plate in the following positions using shielded metal arc welding techniques: <ul style="list-style-type: none"> <input type="checkbox"/> flat : square butt, single and double "V" butt <input type="checkbox"/> horizontal : single "V" butt <input type="checkbox"/> vertical : square butt and single "V" <input type="checkbox"/> horizontal - vertical : "T" joint <input type="checkbox"/> overhead : single "V" butt 	1. Tested in accordance with company's of welding practice. 2. All safety aspects adhered to.

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	AW8	Weld steel pipes in the following positions using shielded metal arc welding techniques: <ul style="list-style-type: none"> <input type="checkbox"/> flat (rotated) : square butt and single "V" butt <input type="checkbox"/> horizontal : single "V" butt <input type="checkbox"/> flat (non rotated) : single "V" butt <input type="checkbox"/> 6 G position 	1. Tested in accordance with company's of welding practice. 2. All safety aspects adhered to. 3. $\pm 5^\circ$ on axis.
	AW9	Maintenance of shielded metal arc welding equipment with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> welding cables and connections <input type="checkbox"/> electrode holder <input type="checkbox"/> protective clothing and equipment 	1. 100% correct to suppliers instructions 2. All equipment clean and in a safe work condition. 3. All safety aspects adhered to.
L ARC	GMA1	Recall the equipment used in gas metal arc welding and explain their use with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinder (shielded gas) <input type="checkbox"/> power source <input type="checkbox"/> wire feed and control unit <input type="checkbox"/> welding cables <input type="checkbox"/> electrode wire <input type="checkbox"/> protective clothing and equipment 	Minimum of 20 questions with 100% pass
	GMA2	Identify and set up gas metal arc welding machine including starting up and shutting down procedures with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinder <input type="checkbox"/> gas connections <input type="checkbox"/> rubber hoses <input type="checkbox"/> water connections (if used) <input type="checkbox"/> fitting of electrode wire <input type="checkbox"/> welding gun 	

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GMA3	Select and examine relevant welding electrode wire with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> solid wire electrodes <input type="checkbox"/> flux cored wire electrodes <input type="checkbox"/> aluminium <input type="checkbox"/> copper and nickel 	1. 100% correct according to the supplier number. 2. 100% correct as per company's welding sheets.
GMA4	Prepare material and equipment for gas metal arc welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> weld joint preparation <input type="checkbox"/> position of joint <input type="checkbox"/> shielded gas <input type="checkbox"/> wire electrode diameter and type <input type="checkbox"/> electrode wire speed feed <input type="checkbox"/> amperage setting <input type="checkbox"/> voltage setting <input type="checkbox"/> pre and post heat treatment <input type="checkbox"/> interpass temperatures <input type="checkbox"/> tolerances and finishes 	1. 100% correct to company's welding procedure and welding data sheets. 2. All safety aspects adhered to.
GMA5	Identify gas metal arc welding defects and explain their causes including how to rectify defects with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> porosity <input type="checkbox"/> lack of penetration <input type="checkbox"/> lack of fusion <input type="checkbox"/> cracking <input type="checkbox"/> undercut <input type="checkbox"/> spatter 	Minimum of 10 question with 100% pass.

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GMA6	Recall information on welding procedure sheets applicable to gas metal arc welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> parent metal type <input type="checkbox"/> electrode wire diameter and type <input type="checkbox"/> amperage setting <input type="checkbox"/> voltage setting <input type="checkbox"/> pre and post heat treatment <input type="checkbox"/> interpass temperatures <input type="checkbox"/> joint design, shape and size <input type="checkbox"/> back grinding or back gouging <input type="checkbox"/> tolerances and finishes 	100% correct according to information on welding procedure sheet.
GMA7	Weld steel sheet and plates in the following positions using gas metal arc welding techniques: <ul style="list-style-type: none"> <input type="checkbox"/> flat : corner joint, square butt <input type="checkbox"/> horizontal : single "V" butt <input type="checkbox"/> vertical : corner joint, square butt, "T" joint <input type="checkbox"/> horizontal - vertical : "T" joint 	1. Tested in accordance with company's of welding practice. 2. All safety aspects adhered to.
GMA8	Weld steel pipes in following position using gas metal arc welding techniques: <ul style="list-style-type: none"> <input type="checkbox"/> flat (rotated) : single "V" butt <input type="checkbox"/> horizontal : single "V" butt <input type="checkbox"/> vertical : single "V" butt <input type="checkbox"/> 6 G position <input type="checkbox"/> including branch connections 	1. Tested in accordance with company's of welding practice. 2. All safety aspects adhered to.
GMA10	Weld aluminium sheet and plate in the following positions: <ul style="list-style-type: none"> <input type="checkbox"/> flat : single "V" butt <input type="checkbox"/> vertical : corner joint, "T" joint, square butt <input type="checkbox"/> overhead : "T" joint <input type="checkbox"/> horizontal : single "V" butt 	1. Tested in accordance with company's of welding practice. 2. All safety aspects adhered to.

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	GMA11	Maintenance of gas metal arc welding equipment with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinders <input type="checkbox"/> gas connections <input type="checkbox"/> rubber hoses <input type="checkbox"/> water connections (if used) <input type="checkbox"/> welding connections and cables <input type="checkbox"/> wire reel <input type="checkbox"/> welding gun <input type="checkbox"/> protective clothing and equipment <input type="checkbox"/> regulators 	1. 100% correct to suppliers instructions 2. All equipment clean and in a safe functional working condition. 3. All safety aspects adhered to.
TUNGSTEN ARC	GTA1	Recall the equipment used in gas tungsten arc welding and explain their uses with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinder (inert gas supply) <input type="checkbox"/> power sources (AC and DC) <input type="checkbox"/> air cooled torches <input type="checkbox"/> water cooled torches <input type="checkbox"/> water connections <input type="checkbox"/> gas connections <input type="checkbox"/> welding cables and connections <input type="checkbox"/> electrode holder <input type="checkbox"/> tungsten electrode <input type="checkbox"/> filler rod <input type="checkbox"/> remote control (if used) <input type="checkbox"/> rubber hoses 	Minimum of 20 questions with 100% pass

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CODE	OBJECTIVES	CRITERIA
GTA2	Identify and set up gas tungsten arc welding equipment including starting up and shutting down procedures with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> gas cylinder (inert gas supply) <input type="checkbox"/> power sources (AC and DC) <input type="checkbox"/> air cooled torches <input type="checkbox"/> water cooled torches (if used) <input type="checkbox"/> water connections (if used) <input type="checkbox"/> gas connections <input type="checkbox"/> rubber hoses <input type="checkbox"/> gas nozzles <input type="checkbox"/> electrode holder <input type="checkbox"/> tungsten electrode <input type="checkbox"/> remote control (if used) 	1. 100% correct to suppliers instructions 2. All safety aspects adhered to.
GTA3	Select and examine relevant tungsten welding electrode and filler rods with special reference to choice of filler rod or wire	1. 100% correct according to suppliers data sheets. 2. 100% correct as per company's welding data sheets.
GTA4	Prepare material and equipment for tungsten arc welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> weld joint preparation <input type="checkbox"/> position of joint <input type="checkbox"/> inert gas supply <input type="checkbox"/> tungsten electrode <input type="checkbox"/> filler rods <input type="checkbox"/> shielded gas <input type="checkbox"/> gas flow rate <input type="checkbox"/> current setting <input type="checkbox"/> nozzle size <input type="checkbox"/> type of electrode holder <input type="checkbox"/> tolerances and finishes 	1. 100% correct to company's welding data sheets. 2. All safety aspects adhered to.

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GTA5	Identify gas tungsten arc welding defects and explain their causes including how to rectify defects with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> porosity <input type="checkbox"/> undercut <input type="checkbox"/> lack of fusion (side, root or inter-run) <input type="checkbox"/> lack of penetration <input type="checkbox"/> inclusions <input type="checkbox"/> cracking 	Minimum of 10 questions with 100% pass
GTA6	Recall information on welding procedure sheets as applicable to gas tungsten arc welding with special reference to: <ul style="list-style-type: none"> <input type="checkbox"/> parent metal type <input type="checkbox"/> filler rod and type <input type="checkbox"/> current settings <input type="checkbox"/> gas flow rate <input type="checkbox"/> pre and post heat treatment <input type="checkbox"/> interpass temperatures <input type="checkbox"/> tolerances and finishes <input type="checkbox"/> joint design, shape and size 	100% correct according to information on welding procedure sheets.
GTA7	Weld aluminium sheet and plate in the following positions using gas tungsten arc welding techniques: <ul style="list-style-type: none"> <input type="checkbox"/> flat : square butt <input type="checkbox"/> horizontal : square butt <input type="checkbox"/> vertical : square butt <input type="checkbox"/> horizontal - vertical : "T" joint 	1. Tested by company in accordance with current code of welding practice. 2. All safety aspects adhered to.

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	CODE	OBJECTIVES	CRITERIA
	TT2	Mathematics N2 Relevant Trade Theory N2 Plus two relevant subjects N2 Should the apprentice have a qualification higher than that prescribed in the schedule, it must be ensured that the subjects are relevant to the trade in question, before a trade test will be allocated.	Obtain a four subject certificate.
ON-THE-JOB EXPERIENCE AND INDEPENDENT WORK	EX2	On-the-job experience and independent work should cover at least 80% of all practical modules. To ensure as wide as possible field of experience and must take place under qualified supervisory control.	All work done to be recorded with respect to performance levels.
	EX4	On-the-job experience and independent work should include the following welding or cutting machines where the necessary facilities are available and must take place under qualified supervisory control: <ul style="list-style-type: none"> <input type="checkbox"/> resistance welding <input type="checkbox"/> plasma arc welding and cutting <input type="checkbox"/> electroslag <input type="checkbox"/> submerged arc welding <input type="checkbox"/> oxygen-fuel gas flame gouging <input type="checkbox"/> air/arc gouging <input type="checkbox"/> robot controlled welding machines 	