



CHEMICAL INDUSTRIES EDUCATION & TRAINING AUTHORITY
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WELDER

TRAINING SCHEDULE

&

RECORD OF APPRENTICE TRAINING

add name & CHIETA contract number

add employers name

(The employer is encouraged to add their logo, pictures to this document...)

Welcome to the start of your exciting career in engineering!

The Training Schedule and Record of Apprentice Training are used as a master copy for each individual apprentice's training. It can be copied as required by the company/training centre for issue to the apprentice.

The apprentice and company may customize the arrangement of the documentation to suite the local context and branding.

.This Training Schedule and Record of Apprentice Training consists of four parts:

- 1 **Training Schedule** in which the scope of learning and criteria to be met are given
- 2 **Course Map** in which the common progression of training is shown.
- 3 **Individual Training Programme**
- 4 **Record of Apprentice Training**

TRAINING SCHEDULE

The Training Schedule below contains the basic training requirements for the relevant trade. Additional modules may be incorporated into the schedule at the discretion of the company if deemed necessary to meet specific training needs.

Any changes or deviations from the Training Schedule must be agreed to by the Apprenticeship Manager at the CHIETA before training based on these changes commences. This is essential to ensure that the learning required for the trade is addresses before an apprentice can attend a trade test

COURSE MAP

The course map is laid out in four phases and in the most logical sequence. A company test is to be conducted at the end of each phase. This map should form the basis of the Individual Training Programme that is developed and agreed to by the employer and the individual apprentice

RECORD OF APPRENTICE TRAINING

This record replaces the old "log book" system. The record is laid out in relation to the four phases. Every **code must be signed off when the apprentice is declared competent** by the relevant artisan (mentor / coach / supervisor) and provider when the relevant learning module is successfully completed.

This record serves as the master record of training completed and should be retained by the apprentice in a safe place.

A copy must also be retained by the employer in a safe place.

Copies of the training record, as indicated below, must be sent to the Apprenticeship Unit at the CHIETA. It is recommended that this be done after each phase has been successfully completed and the test passed so that any shortfalls can be identified and addressed timeously:

- Phase 1 – submit relevant pages**
- Phase 2 – submit relevant pages**
- Phase 3 – submit relevant pages**
- Phase 4 – submit relevant pages with an application for a trade test.**

Before a trade test can be attempted, an apprentice must have completed 80 weeks of on the job training (at the employer) and all the modules in the training schedule (at least 32 weeks over the four phases), as well as the relevant N course or CHIETA approved N2 equivalent (approximately 10 weeks).

Completion of the whole Record of Apprentice Training is the standard of evidence required for access to a trade test.

INDIVIDUAL TRAINING PROGRAMME

This is a table, chart or similar document that is developed by the employer and agreed to by the individual apprentice.

It must show **when** and **where** each module or other training activity is to take place and which **objectives** in the Training Schedule (with **reference to the code**) are addressed in the different modules in.

This programme must be attached to the individual apprentice's Record of Apprentice Training.

All deviations and changes to the programme that occur during the training of the apprentice must be indicated on the programme.

THEORETICAL TRAINING

A four subject pass is needed to obtain the N course. Mathematics and the relevant trade theory subjects are compulsory. A further two relevant subjects must be chosen by the employer, college and apprentice to obtain the four subjects required for the course.

Should an 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 date will be allocated.

Please note that the Employer may apply for the apprentice to conduct the CHIETA approved N2 equivalent subjects.

Certified copies the results of all theoretical training must be attached to the Record of Apprentice Training

PLEASE NOTE:

THE CHIETA APPRENTICESHIP UNIT IS TO BE NOTIFIED OF ALL ABSENTEEISM FROM THE WORKPLACE OR PROVIDER OF TRAINING

PART 1 TRAINING SCHEDULE FOR THE TRADE: WELDER

MODULE	CODE	OBJECTIVES	CRITERIA
INDUCTION	ID7	Recall applicable sections of the Artisan Training and Recognition Agreement with special reference to discipline, legal responsibilities and training procedures.	1. Pass a questionnaire with at least 80%.
	ID8	Recall terms and conditions as approved by the MEIETB.	1. Pass a questionnaire with at least 80%.
	ID3	Recall applicable grievance procedures.	1. Pass a questionnaire with at least 80%.
	ID4	Recall applicable disciplinary procedures.	1. Pass a questionnaire with at least 80%.
	ID5	Recall company rules and procedures.	1. Pass a questionnaire with at least 80%.
	ID6	Recall quality assurance procedures.	1. Correct according to company standards and procedures with a minimum of 5 questions and 100% pass.
SAFETY	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).	1. Pass a questionnaire with at least 80%.
	SF2	Attend a standard industrial safety course.	1. Obtain a recognised certificate.

MODULE	CODE	OBJECTIVES	CRITERIA
	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.	1. All safety aspects correct according to welding and oxygen - fuel gas cutting processes utilised by the company.
	SF4	Attend a first aid course.	1. Obtain a recognised certificate 1st level.
	SF5	Identify relevant colour coding and symbolic safety signs.	1. 100% as per SABS 0140 and SABS 1186 publications.
	SF6	Identify relevant colour codes for compressed gas cylinders.	1. 100% correct.
HAND AND WORKSHOP TOOLS	HT1	Identify measuring, cutting, marking and fastening tools.	1. Correctly identify all tools, stating their functional use.
	HT2	Use measuring, cutting, marking and fastening tools.	1. 100% correct functional application for each tool.
	HT3	Maintain measuring, cutting, marking and fastening tools.	1. All tools clean and in a safe and functional working condition.
	HT4	Identify, use and maintain hand tools applicable to the trade.	1. Correctly identify all tools; stating their functional use. 2. 100% correct; functional application for each tool. 3. All tools clean and in a safe functional working 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.	1. Correct speeds and feeds to be used. Relevant to metal.
	WT2	Use fixed and portable grinding machines. NB to be conducted in relation to module WT22 - dress a grinding wheel.	1. All safety aspects adhered to.
	WT22	Dress a grinding wheel.	1. Wheel must be concentric. 2. All safety aspects adhered to.
	HS3	Sharpen drills.	1. Angle according to relevant metal to be drilled. 2. All safety aspects adhered to.
MATERIALS	MA1	Recall terms, definitions and use of materials applicable to the trade with special reference to :	1. Minimum of 20 questions with at least 80% pass.

MODULE	CODE	OBJECTIVES	CRITERIA
		<ul style="list-style-type: none"> - Sheet metal - Plate - Tubes - Pipes - Rolled sections - Hollow sections 	
	MA2	Recall properties of metals and explain the purpose for using specified metals.	1. Minimum of 15 questions with at least 80% pass.
	MA3	Identify ferrous and non-ferrous metals with special reference to: /Steel/Brass/Copper/Aluminium	1. Each type of material correctly identified.
	MA4	Recall and identify current identification systems utilised by the company; with special reference to: <ul style="list-style-type: none"> - identification number - colour coding 	1. 100% correct to current identification numbers utilised within the company. 2. 100% correct accordance with relevant colour coding charts utilised within the company.
	MA5	Identify metal defects visually.	1. Each type of defect correctly identified.
DRAWINGS AND SKETCHES	DS1	Recall terms and definitions pertaining to engineering drawings.	1. Minimum of 15 questions with 100% pass.
	DS2	Read and Interpret relevant symbols abbreviations, tolerances and welding symbols.	1. Minimum of 20 questions with 100% pass in relation to SABS 044 Part 2, including American welding 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.	1. 100% correct in relation to SABS 044 Part 2, SABS 0111 including standard welding symbols; American welding symbols and British standard welding symbols.
	DS4	Read and interpret engineering drawings in order to compile material lists.	1. All terms, definitions and specifications to be noted correctly and all relevant detail and dimensions to be present for manufacture.
MARKING OFF	MT1	Lay out and mark off work pieces and positions from drawings, including template work on plate.	1. Maximum accumulative tolerance of 0,5mm up to 1 metre and 1,00mm above 1 metre.
	MT2	Lay out and mark off work pieces and positions from drawings on rolled sections.	1. Maximum accumulative tolerance of 0,5mm up to 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.	1. Maximum accumulative tolerance of 0,5mm up to 1 metre and 1,00mm above 1 metre.

MODULE	CODE	OBJECTIVES	CRITERIA
THERMAL APPLICATION	TA1	Recall the effects of heat input whilst welding and gas cutting with special reference to: <ul style="list-style-type: none"> – expansion – contraction and explain the method to prevent or rectify the effects of expansion and contraction.	1. Minimum of 10 questions with at least 80% pass.
BASIC LIFTING TECHNIQUES	BG2	Recall overhead crane hand signals.	1. 100% correct according to recognised code of practice.
	BG3	Demonstrate overhead crane hand signals.	1. 100% correct according to recognised code of practice.
	BG4	Use the following equipment <ul style="list-style-type: none"> – chain block – coffer block – shackles – chain slings – wire rope slings – tirsors 	<ol style="list-style-type: none"> 1. Working load not to exceed equipment safe loading capacity. 2. 100% correct method of slings 3. No damage to equipment. 4. No kinks or twist in chain, wire rope or nylon rope slings.
TRADE RELATED SKILLS	TRS1	Operate a guillotine.	<ol style="list-style-type: none"> 1. Adjust guillotine 100% correct according to the company's cutting specifications. 2. All safety aspects adhered to.
	TRS2	Operate a power saw.	<ol style="list-style-type: none"> 1. Adjust power saw 100% correct according to the company's cutting specifications. 2. All safety aspects adhered to.
OXY-FUEL GAS WELDING AND BRAZING	GW1	Recall the equipment used in oxygen-fuel gas welding and brazing and explain their use with special reference to: <ul style="list-style-type: none"> – gas cylinders – regulators – hoses and connections – torch – welding tips – filler rods – welding goggles, spark lighter and nozzle cleaners. 	1. 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	<ol style="list-style-type: none"> 1. Correct according to suppliers instructions. 2. All safety aspects adhered to.

MODULE	CODE	OBJECTIVES	CRITERIA
		reference to: gas cylinders/gas connections/regulators/torch/welding tips/spanners and cylinder key/lash back arrestor	
	GW3	Select and examine relevant gas welding filler rods, for correct application.	<ol style="list-style-type: none"> 100% correct as per suppliers specifications. 100% correct according to company's welding data sheets.
	GW4	Prepare material and equipment for gas welding with special reference to: <ul style="list-style-type: none"> – weld joint preparation – parent metal – filler rods – fluxes – direction of welding – gas pressures – position for welding – size of welding tip – pre and post heating – flame setting – tolerances and finishes 	<ol style="list-style-type: none"> 100% correct to company welding procedures and welding data sheets. All safety aspects adhered to.
	GW5	Identify oxygen-fuel gas welding defects and explain the causes including how to rectify defects.	<ol style="list-style-type: none"> 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"> – flat : square butt – horizontal : square butt – vertical : square butt, "T" joint – horizontal - vertical : "T" joint, corner joint 	<ol style="list-style-type: none"> Tested according to company's current code of welding practices. 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"> – flat : single "V" butt – horizontal : single "V" butt – 6 G position 	<ol style="list-style-type: none"> Tested according to company's current code of welding practices. All safety aspects adhered to. $\pm 5^\circ$ on axis.
	GW8	Identify oxygen-fuel gas brazing defects and explain their causes including how to rectify defects.	<ol style="list-style-type: none"> Minimum of 10 questions with 100% pass.
	GW9	Braze sheet and plate in the following positions using oxygen-fuel gas	<ol style="list-style-type: none"> Tested according to company's current code of welding

MODULE	CODE	OBJECTIVES	CRITERIA
	GW10	brazing techniques :flat : square butt/horizontal - vertical : "T" joint Maintenance of oxygen-fuel gas equipment with special reference to: <ul style="list-style-type: none"> - blowpipes - torches - rubber hoses - gas connections - regulators - cylinders - flash back arrestor 	practices. 2. All safety aspects adhered to. 1. 100% correct to suppliers instructions. 2. All equipment clean and in a safe functional working condition. 3. All safety aspects adhered to.
OXYGEN-FUEL GAS CUTTING	GC1	Recall the equipment used in oxygen-fuel gas and explain their uses with special reference to: <ul style="list-style-type: none"> - gas cylinder - regulators - hoses and connections - torch - nozzles - spanners and cylinder keys - welding goggles spark lighter and nozzle cleaners - flash back arrestor 	1. Minimum of 20 questions with 100% pass
	GC2	Identify and assemble oxygen-fuel gas cutting equipment with special reference to: <ul style="list-style-type: none"> - gas cylinders - regulators - hoses - torch - nozzles - 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"> - tolerance - finishes 	1. 100% correct to company's quality standards. 2. Within 2mm deviation from line over 300mm. 3. All safety aspects adhered to.

MODULE	CODE	OBJECTIVES	CRITERIA
	GC5	Bevel plate and pipes with gas cutting torch for welding preparation with special reference to: <ul style="list-style-type: none"> - tolerances - finishes 	<ol style="list-style-type: none"> 1. 100% correct to company's quality standards. 2. Within 1° on angle and within 2mm on landing. 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"> - tolerances - finishes 	<ol style="list-style-type: none"> 1. 100% correct to company's quality standards. 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"> - gas cylinder - regulators - hoses and connections - torch - nozzles - flash back arrestors 	<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.
SHIELDED METAL ARC WELDING (MANUAL METAL ARC 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"> - Power source AC and DC machines - Welding cables and connections - Electrode holder - Consumable covered electrodes - Protective clothing and equipment 	<ol style="list-style-type: none"> 1. 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"> - power source - AC and DC machines - welding cables and connections - electrode holder 	<ol style="list-style-type: none"> 1. 100% correct according to suppliers instruments. 2. All safety aspects adhered to.
	AW3	Select and examine relevant welding electrodes.	<ol style="list-style-type: none"> 1. 100% correct according to the suppliers coding system as stated on the electrode box. 2. 100% correct as per company's welding data sheets.
	AW4	Prepare material and equipment for shielded metal arc welding with special reference to: <ul style="list-style-type: none"> - welded joint preparation - amperage setting - position for welding - relevant welding electrodes 	<ol style="list-style-type: none"> 1. 100% correct as per company's welding data sheets. 2. All safety aspects adhered to.

MODULE	CODE	OBJECTIVES	CRITERIA
	AW5	<ul style="list-style-type: none"> – pre and post heat treatment – interpass temperatures – tolerances finishes <p>Identify shielded metal arc welding defects and explain their causes including how to rectify defects with special reference to:</p> <ul style="list-style-type: none"> – undercut – surface porosity – incomplete penetration – excessive penetration – uneven weld bead – excessive weld cap – overlap – stop-start craters – splatter – root concavity – distortion 	<ol style="list-style-type: none"> 1. Minimum of 10 questions with 100% pass.
	AW6	<p>Recall information on welding data sheets as applicable to shielded metal arc welding with special reference to:</p> <ul style="list-style-type: none"> – parent metal type – electrode size and type – amperage settings – pre and post heat treatment – interpass temperatures – joint design, shape and size – back grinding or back gouging information – tolerances and finishes 	<ol style="list-style-type: none"> 1. 100% correct according to information on company's welding data sheets.
	AW7	<p>Weld steel plate in the following positions using shielded metal arc welding techniques:</p> <ul style="list-style-type: none"> – flat : square butt, single and double "V" butt – horizontal : single "V" butt – vertical : square butt and single "V" – horizontal - vertical : "T" joint – overhead : single "V" butt 	<ol style="list-style-type: none"> 1. Tested in accordance with company's current code of welding practice. 2. All safety aspects adhered to.
	AW8	<p>Weld steel pipes in the following positions using shielded metal arc welding techniques:</p> <ul style="list-style-type: none"> – flat (rotated) : square butt and single "V" butt 	<ol style="list-style-type: none"> 1. Tested in accordance with company's current code of welding practice. 2. All safety aspects adhered to.

MODULE	CODE	OBJECTIVES	CRITERIA
	AW9	<ul style="list-style-type: none"> - horizontal : single "V" butt - flat (non rotated) : single "V" butt - 6 G position <p>Maintenance of shielded metal arc welding equipment with special reference to:</p> <ul style="list-style-type: none"> - welding cables and connections - electrode holder - protective clothing and equipment 	<p>3. $\pm 5^\circ$ on axis.</p> <p>1. 100% correct to suppliers instructions. 2. All equipment clean and in a safe working condition. 3. All safety aspects adhered to.</p>
GAS METAL ARC WELDING	GMA1	<p>Recall the equipment used in gas metal arc welding and explain their use with special reference to:</p> <ul style="list-style-type: none"> - gas cylinder (shielded gas) - power source - wire feed and control unit - welding cables - electrode wire - protective clothing and equipment 	<p>1. Minimum of 20 questions with 100% pass.</p>
	GMA2	<p>Identify and set up gas metal arc welding machine including starting up and shutting down procedures with special reference to: gas cylinder/gas connections/rubber hoses/water connections (if used)/fitting of electrode wire/welding gun</p>	<p>1. 100% correct to suppliers instructions. 2. All equipment clean and in a safe working condition. 3. All safety aspects adhered to.</p>
	GMA3	<p>Select and examine relevant welding electrode wire with special reference to:</p> <ul style="list-style-type: none"> - solid wire electrodes - flux cored wire electrodes - aluminium - copper and nickel 	<p>1. 100% correct according to the suppliers code number. 2. 100% correct as per company's welding data sheets.</p>
	GMA4	<p>Prepare material and equipment for gas metal arc welding with special reference to:</p> <ul style="list-style-type: none"> - weld joint preparation - position of joint - shielded gas - wire electrode diameter and type - electrode wire speed feed - amperage setting - voltage setting 	<p>1. 100% correct to company's welding procedures and welding data sheets. 2. All safety aspects adhered to.</p>

MODULE	CODE	OBJECTIVES	CRITERIA
		<ul style="list-style-type: none"> - pre and post heat treatment - interpass temperatures - tolerances and finishes 	
	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"> - porosity - lack of penetration - lack of fusion - cracking - undercut - spatter 	1. Minimum of 10 question with 100% pass.
	GMA6	Recall information on welding procedure sheets applicable to gas metal arc welding with special reference to: <ul style="list-style-type: none"> - parent metal type - electrode wire diameter and type - amperage setting - voltage setting - pre and post heat treatment - interpass temperatures - joint design, shape and size - back grinding or back gouging - tolerances and finishes 	1. 100% correct according to information on company's 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"> - flat : corner joint, square butt - horizontal : single "V" butt - vertical : corner joint, square butt, "T" joint - horizontal - vertical : "T" joint 	1. Tested in accordance with company's current code of welding practice. 2. All safety aspects adhered to.
	GMA8	Weld steel pipes in following position using gas metal arc welding techniques:/flat (rotated) : single "V" butt/horizontal : single "V" butt/vertical : single "V" butt/6 G position/including branch connections	1. Tested in accordance with company's current code of welding practice. 2. All safety aspects adhered to.
	GMA10	Weld aluminium sheet and plate in the following positions:/flat : single "V" butt/vertical : corner joint, "T" joint, square butt/overhead : "T" joint/horizontal : single "V" butt	1. Tested in accordance with company's current code of welding practice. 2. All safety aspects adhered to.

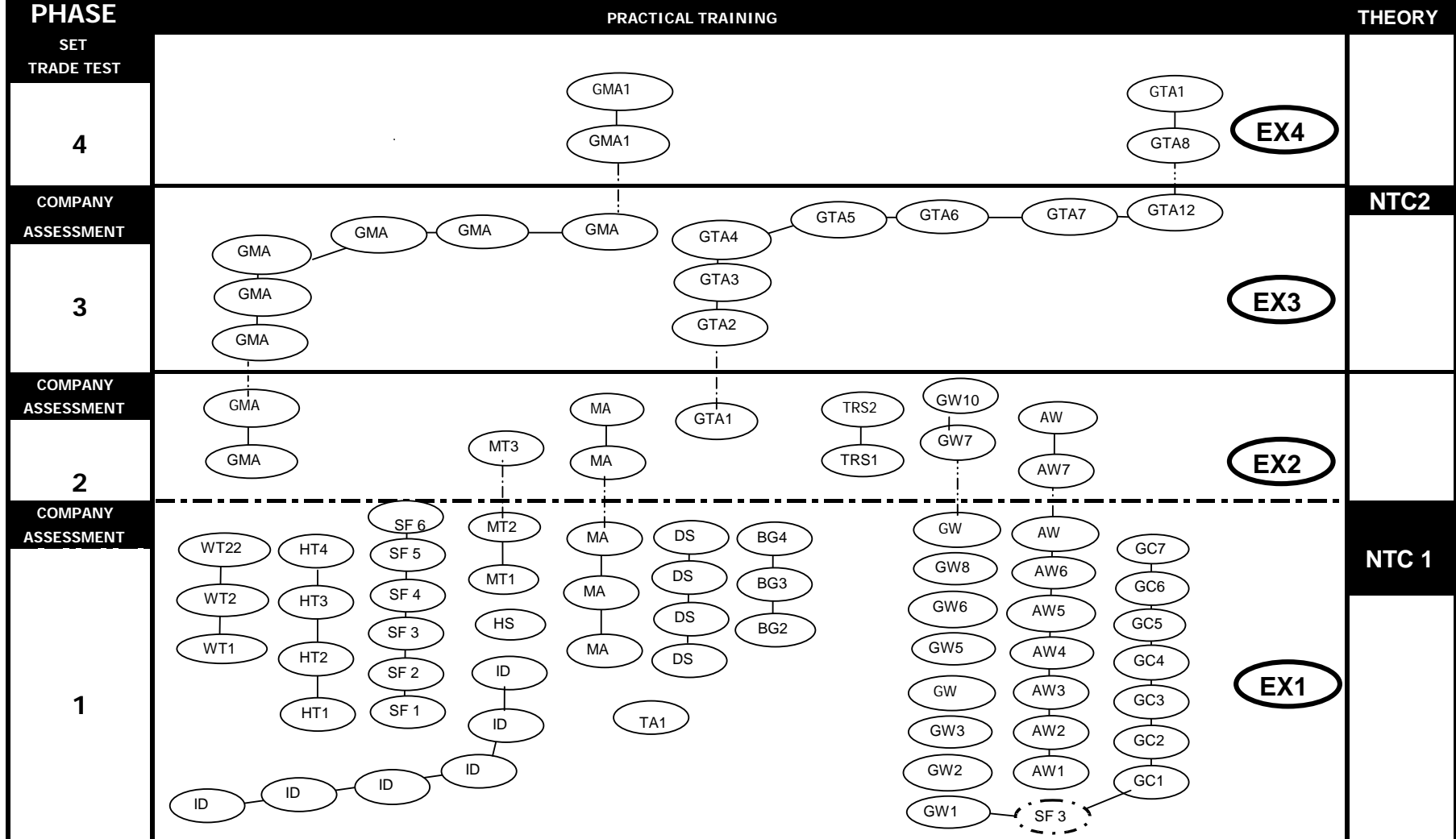
MODULE	CODE	OBJECTIVES	CRITERIA
	GMA11	Maintenance of gas metal arc welding equipment with special reference to: <ul style="list-style-type: none"> - gas cylinders - gas connections - rubber hoses - water connections (if used) - welding connections and cables - wire reel - welding gun - protective clothing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

MODULE	CODE	OBJECTIVES	CRITERIA
	GTA3	Select and examine relevant tungsten welding electrode and filler rods with special reference to choice of filler rod or wire	<ol style="list-style-type: none"> 100% correct according to suppliers code number. 100% correct as per company's welding data sheets.
	GTA4	Prepare material and equipment for tungsten arc welding with special reference to: weld joint preparation/position of joint/inert gas supply/tungsten electrode/filler rods/shielded gas/gas flow rate/current setting/nozzle size/type of electrode holder/tolerances and finishes	<ol style="list-style-type: none"> 100% correct to company's welding procedure and welding data sheets. All safety aspects adhered to.
	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"> - porosity - undercut - lack of fusion (side, root or inter-run) - lack of penetration - inclusions - cracking 	<ol style="list-style-type: none"> 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"> - parent metal type - filler rod and type - current settings - gas flow rate - pre and post heat treatment - interpass temperatures - tolerances and finishes - joint design, shape and size 	<ol style="list-style-type: none"> 100% correct according to information on company's 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"> - flat : square butt - horizontal : square butt - vertical : square butt - horizontal - vertical : "T" joint 	<ol style="list-style-type: none"> Tested by company in accordance with company's current code of welding practice. All safety aspects adhered to.
	GTA8	Weld mild steel sheet and plate in the following positions using gas tungsten arc welding techniques: <ul style="list-style-type: none"> - flat : square butt - vertical : "T" joint 	<ol style="list-style-type: none"> Tested by company in accordance with company's current code of welding practice. All safety aspects adhered to.

MODULE	CODE	OBJECTIVES	CRITERIA
	GTA10	<ul style="list-style-type: none"> – horizontal - vertical : "T" joint Weld mild steel pipes in the following positions using tungsten arc welding techniques: <ul style="list-style-type: none"> – flat (rotated) : square butt – horizontal : square butt – 6 G position 	<ol style="list-style-type: none"> 1. Tested by company in accordance with company's current code of welding practice. 2. All safety aspects adhered to. 3. $\pm 5^\circ$ on axis.
	GTA12	Maintenance of tungsten arc welding equipment with special reference to: <ul style="list-style-type: none"> – gas cylinder – gas connections – rubber hoses – water cooled torches and connections (if used) – air cooled torches (if used) – welding cables and connections – electrode holder – protective clothing and equipment 	<ol style="list-style-type: none"> 1. 100% correct to suppliers instructions. 2. All equipment clean and in a safe and functional working condition. 3. All safety aspects adhered to.
THEORETICAL TRAINING		A four subject pass is needed to obtain the N course. Mathematics and the relevant trade theory subject are compulsory. A further two relevant subjects must be chosen by the employer, college and apprentice in order to obtain the four subjects required for the course.	
	TT1	Mathematics N1 Relevant Trade Theory N1 Plus two relevant subjects N1	<ol style="list-style-type: none"> 1. Obtain a four subject certificate or equivalence
	TT2	Mathematics N2 Relevant Trade Theory N2 Plus two relevant subjects N2	<ol style="list-style-type: none"> 1. Obtain a four subject certificate or equivalence
		OR CHIETA approved N2 Equivalency 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 date will be allocated. This should take approximately 10 weeks.	
ON THE JOB EXPERIENCE AND INDEPENDENT WORK	EX2	On the job experience and independent work should cover at least 80% of all modules plus at least 4 machines in the module machines to ensure as wide as possible field of experience and must take place	<ol style="list-style-type: none"> 1. All work done to be recorded with respect to performance levels.

MODULE	CODE	OBJECTIVES	CRITERIA
	EX4	<p>under supervisory control. This must be at least 80 weeks 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:</p> <ul style="list-style-type: none"> - resistance welding - plasma arc welding and cutting - electroslag - submerged arc welding - oxygen-fuel gas flame gouging - air/arc gouging - robot controlled welding machines 	
TRAINING PROVIDER	TP1	<p>Training at an accredited provider of apprentice training, for a minimum period of 32 weeks over the 4 phases. Training must cover all the modules of the training schedule. If the candidate does not have NTC2, the candidate must conduct an additional 10 weeks to attain the N2 or a CHIETA approved equivalency. This must be obtained at a provider accredited / approved for theoretical training</p>	1. All work done to be recorded with respect to performance levels.

**GRAPHIC ILLUSTRATION
COMPETENCY BASED MODULAR TRAINING PROGRAM
3 YEAR APPRENTICE CONTRACT- WELDER (MINIMUM 80 WEEKS - ON THE JOB)**



Apprentice Name		Contract Number		Trade: Welder		Employer		Page No: 1	
Month:		Year:							
Week 1		Week 2		Week 3		Week 4		Week 5	
Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Activity: <i>Induction</i>	Activity: <i>xxx</i>	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:
Course	Venue: <i>place</i>	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:
Company	Code <i>XX1</i>	Code:	Code:	Code:	Code:	Code:	Code:	Code:	Code:
training									
Room									
Code									
ID 1									
ID2									
ID3									
ID4									
ID5									
ID6									
ID									
assessment									
test									
Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:
Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:
Code	Code	Code:	Code:	Code:	Code:	Code:	Code:	Code:	Code:
Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:	Activity:
Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:	Venue:
Code	Code	Code:	Code:	Code:	Code:	Code:	Code:	Code:	Code:

PART 4 RECORD OF APPRENTICE TRAINING

APPRENTICE TRAINING RECORD					PAGE 1 - 3		TRADE : WELDER		
EMPLOYER:						CONTRACT NO:			
APPRENTICE'S SURNAME & INITIALS:									
I.D. NUMBER:									
CONFIRMATION OF TRAINING PRESENTED									
MODULE AND MODULE CODE			PHASE 1				MODULE AND MODULE CODE		
CODE	SIGNATURE		DATE	CODE	SIGNATURE		DATE		
	APPRENTICE	SUPERVISOR			APPRENTICE	SUPERVISOR			
P= Provider E Employer									
INDUCTION / MODULE 1				HS3	P				
					E				
ID7	P			MATERIALS / MODULE 4					
	E								
ID8	P			MA1	P				
	E				E				
ID3	P			MA2	P				
	E				E				
ID4	P			MA3	P				
	E				E				
ID5	P			DRAWINGS AND SKETCHES / MODULE 5					
	E								
ID6	P			DS1	P				
	E				E				
SAFETY / MODULE 2				DS2	P				
					E				
SF1	P			DS3	P				
	E				E				
SF2	P			DS4	P				
	E				E				
SF3	P			MARKING OFF / MODULE 6					
	E								
SF4	P			MT1	P				

	E					E				
SF5	P				MT2	P				
	E					E				
SF6	P				THERMAL APPLICATIONS / MODULE 7					
	E									
HAND AND WORKSHOP TOOLS / MODULE 3					TA1	P				
						E				
HT1	P				BASIC LIFTING TECHNIQUES / MODULE 8					
	E									
HT2	P				BG2	P				
	E					E				
HT3	P				BG3	P				
	E					E				
HT4	P				BG4	P				
	E					E				
WT1	P				OXY-FUEL GAS WELDING AND BRAZING / MODULE 10					
	E									
WT2	P				GW1	P				
	E					E				
WT2 2	P				GW2	P				
	E					E				
OXY-FUEL GAS WELDING AND BRAZING (CONT.) / MODULE 10					OXYGEN-FUEL GAS CUTTING (CONT.) / MODULE 11					
GW3	P				GC4	P				
	E					E				
GW4	P				GC5	P				
	E					E				
GW5	P				GC6	P				
	E					E				
GW6	P				GC7	P				
	E					E				
GW8	P				THEORETICAL TRAINING					

	E							
GW9	P				NTC1			
	E							
GW10	P							
	E							
SHIELDED METAL ARC WELDING (MANUAL) / MODULE 12								
AW1	P							
	E							
AW2	P				PHASE 1 COMPANY TEST			
	E							
AW3	P							
	E							
AW4	P							
	E							
AW5	P							
	E							
AW6	P				WORKPLACE EXPERIENCE			
	E							
AW9	P				EX1			
	E							
OXYGEN-FUEL GAS CUTTING / MODULE 11								
GC1	P				INSERT COMPANY RUBBER STAMP			
	E							
GC2	P							
	E							
GC3	P							
	E							
AFTER THE APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 1 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA								

APPRENTICE TRAINING RECORD					PAGE 1-2		TRADE : WELDER	
EMPLOYER:						CONTRACT NO:		
APPRENTICE'S SURNAME & INITIALS:								
I.D. NUMBER:								
CONFIRMATION OF TRAINING PRESENTED								
MODULE AND MODULE CODE			PHASE 2			MODULE AND MODULE CODE		
CODE	SIGNATURE		DATE	CODE	SIGNATURE		DATE	
	APPRENTICE	SUPERVISOR			APPRENTICE	SUPERVISOR		
P= Provider E Employer								
MATERIALS / MODULE 4								
MA4	P				PHASE 2 COMPANY TEST			
	E							
MA5	P							
	E							
MARKING OFF / MODULE 6								
MT3	P							
	E							
TRADE RELATED SKILLS / MODULE 9								
TRS 1	P							
	E							
TRS 2	P				WORKPLACE EXPERIENCE			
	E							
OXY-FUEL GAS WELDING AND BRAZING / MODULE 10				EX2				
GW7	P							
	E							
SHIELDED METAL ARC WELDING (MANUAL) / MODULE 12								
AW7	P							
	E							
AW8	P				INSERT COMPANY RUBBER STAMP			
	E							
GAS METAL ARC WELDING / MODULE 13								

GMA 1	P							
	E							
GMA 2	P							
	E							
GAS TUNGSTEN ARC WELDING / MODULE 14								
GTA 1	P							
	E							
AFTER THE APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 2 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA								

EMPLOYER:	CONTRACT NO:
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APPRENTICE'S SURNAME & INITIALS:

I.D. NUMBER:

CONFIRMATION OF TRAINING PRESENTED

MODULE AND MODULE CODE	PHASE 3	MODULE AND MODULE CODE
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CODE	SIGNATURE		DATE	CODE	SIGNATURE		DATE
	APPRENTICE	SUPERVISOR			APPRENTICE	SUPERVISOR	

P= Provider E Employer

GAS METAL ARC WELDING / MODULE 13	WORKPLACE EXPERIENCE
--	-----------------------------

GMA 3	P				EX3			
	E							
GMA 4	P							
	E							
GMA 5	P							
	E							
GMA 6	P							
	E							
GMA 7	P							
	E							
GMA 8	P							
	E							

GAS TUNGSTEN ARC WELDING / MODULE 14	
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GTA 2	P							
	E							
GTA 3	P							
	E							
GTA 4	P				INSERT COMPANY RUBBER STAMP			
	E							
GTA 5	P							
	E							

GTA 6	P							
	E							
GTA 7	P							
	E							
GTA 12	P							
	E							
THEORETICAL TRAINING								
NTC2								
PHASE 3 COMPANY TEST								
AFTER THE APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 3 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA								

APPRENTICE TRAINING RECORD					PAGE 1		TRADE : WELDER	
EMPLOYER:						CONTRACT NO:		
APPRENTICE'S SURNAME & INITIALS:								
I.D. NUMBER:								
CONFIRMATION OF TRAINING PRESENTED								
MODULE AND MODULE CODE			PHASE 4			MODULE AND MODULE CODE		
CODE	SIGNATURE		DATE	CODE	SIGNATURE		DATE	
	APPRENTICE	SUPERVISOR			APPRENTICE	SUPERVISOR		
P= Provider E Employer								
GAS METAL ARC WELDING / MODULE 13								
GMA 10	P							
	E							
GMA 11	P							
	E							
GAS TUNGSTEN ARC WELDING / MODULE 14								
GTA 8	P							
	E							
GTA 10	P							
	E							
ON THE JOB EXPERIENCE AND INDEPENDENT WORK				INSERT COMPANY RUBBER STAMP				
EX1								
EX2								
EX3								
EX4								
AFTER THE APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 4 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA WITH AN APPLICATION FOR A FINAL TEST								

REMEMBER TO APPLY FOR YOUR TRADE TEST