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# **INSTRUMENT MECHANICIAN**

## **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!*

## FOR YOUR ATTENTION

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 all pages**

**Phase 2 – submit all pages**

**Phase 3 - submit all pages**

**Phase 4 - submit all 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: INSTRUMENT MECHANICIAN**

MODULE	CODE	OBJECTIVES	CRITERIA
<b>INDUCTION</b>	ID1	Recall applicable sections of the Artisan Training and Recognition Agreement, with special reference to discipline, legal responsibilities and training procedures.	Pass a questionnaire with at least 80%.
	ID2	Recall terms and conditions as approved by the relevant ETQA.	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 and procedures with a minimum of 5 questions and 100% pass.
<b>SAFETY</b>	SF1	Recall basic safety aspects to the following relevant Acts (where applicable) with reference to SF2 : – Occupational Health and Safety Act (Act No 85, 1993)	Pass a questionnaire with at least 80%.
	SF2	Attend a standard industrial safety course accredited by the industry.	Obtain a recognised certificate.
	SF3	Recall safety in welding and gas cutting.	All safety aspects correct according to accredited procedures.
	SF4	Attend a first aid course.	Obtain a recognised certificate - 1st level.
	SF5	Identify relevant colour markings and symbolic safety signs.	Correct use of SABS 0140 and SABS 1186 publications.
<b>HAND TOOLS</b>	HT1	Identify measuring, checking, forming, cutting, marking and fastening tools and tooling aids.	Correctly identify all the tools and state all their physical characteristics.
	HT2	Use measuring, checking, forming, cutting, marking and fastening tools and tooling aids.	a) <u>Measuring and marking tools</u> - 1,0mm accumulative dimensional tolerances b) <u>Checking tools</u> - 0,5mm dimensional tolerance. c) <u>Forming, cutting and marking tools</u> - correct application. d) All safety aspects adhered to.
	HT3	Maintain measuring, checking, forming, cutting, marking and fastening tools	Tools in a safe and functional working condition.

MODULE	CODE	OBJECTIVES	CRITERIA
	HT4	and tooling aids. Use hand tools applicable to the trade.	<ol style="list-style-type: none"> <li>1. All safety aspects adhered to.</li> <li>2. No tools or equipment is damaged.</li> <li>3. All tools and equipment are clean after use.</li> </ol>
<b>WORKSHOP TOOLS</b>	WT1	Use fixed and portable drilling machines.	<ol style="list-style-type: none"> <li>1. Correct speeds and feeds to be used.</li> <li>2. Holes to be within 0,5mm of centre.</li> <li>3. Correct cutting compounds to be used.</li> </ol>
	WT2	Use fixed and portable grinding machines including replacing, setting, truing and ringing of wheels.	All prescribed safety standards applied. <ol style="list-style-type: none"> <li>1. All safety aspects adhered to.</li> <li>2. No equipment is damaged.</li> <li>3. All tools and equipment are clean after use.</li> </ol>
	WT3	Use a portable jig-saw.	
	WT4	Dress a grinding wheel.	Wheel must be concentric.
<b>MATERIALS</b>	ME1	Differentiate between ferrous and non-ferrous metals.	Each type of metal correctly identified.
	ME2	Identify the following conducting materials with respect to conductivity, current carrying capacity and temperature - copper.	Correct according to SABS 0142.
	ME3	Identify and use the following insulating materials with respect to resistivity, temperature and hydroscopic qualities - PVC, glass fibre, bakelite, resins, tapes, epoxy compounds, PVC compounds.	Correct according to the relevant SABS codes and manufacturers' specifications.
<b>DRAWINGS AND SKETCHES</b>	DSE1	Recall symbols and abbreviations used on electrical circuits for schematic and wiring diagrams, connection schedules, cable schedules, layouts and single-line drawings.	Tests of minimum 25 questions to be set with an 80% pass mark in accordance to a recognised code of practice.
	DSE2	Recall symbols and abbreviations pertaining to electronic circuit diagrams.	100% correct according to ISO R286
	DSE3	Interpret electrical drawings.	Explanation of drawing to be 100% functionally correct.

MODULE	CODE	OBJECTIVES	CRITERIA
	DSE4	Interpret electronic circuit diagrams.	Explanation of drawing to be 100% functionally correct.
	DSE5	Compile material lists from electrical, engineering and electronic drawings.	Correct according to the given drawing.
	DSE6	Make elementary drawings and sketches of instrument control loops, pneumatic circuits, electrical circuits, electronic circuits and logic circuits.	100% correct according to ISO 3 511 /2/3 tables.
	DSE7	Recall the function of elementary electronic logic and control loops.	100% correct.
<b>MARKING OFF</b>	MO1	Mark off a project applicable to the trade.	<ol style="list-style-type: none"> <li>All angles to be within <math>\pm 30</math> minutes.</li> <li>All dimensions to be within <math>\pm 0,25</math>mm.</li> </ol>
	MO2	Mark off projects for manufacturing using all standard marking off techniques and tools.	<ol style="list-style-type: none"> <li>According to specific drawing.</li> </ol>
<b>HAND SKILLS</b>	HS1	Fabricate a project applicable to the trade.	To comply with company standards.
	HS2	Sharpen drills.	Angles according to tables and application.
	HS3	Dress screwdrivers.	<ol style="list-style-type: none"> <li>All safety aspects adhered to.</li> <li>Screwdrivers to be functionally correct.</li> </ol>
	HS4	Sharpen punches.	<ol style="list-style-type: none"> <li>All safety aspects adhered to.</li> <li>Correct included angles according to application.</li> </ol>
	HS5	Sharpen marking-off tools.	<ol style="list-style-type: none"> <li>Marking edge to make single scribing lines.</li> </ol>
<b>ARC WELDING</b>	AO1	Identify and set up AC and/or DC welding machines, equipment including starting up and shutting down procedures.	<ol style="list-style-type: none"> <li>Correct according to manufactures Handbook.</li> <li>All safety aspects adhered to.</li> </ol>
	AO2	Differentiate between arc welding consumables.	Correct to manufacturers' specifications.
	AO3	Prepare material for arc welding.	<ol style="list-style-type: none"> <li>Correct according to company welding procedures and practices with regard to weld joint preparation, voltage, amperages and welding</li> </ol>

MODULE	CODE	OBJECTIVES	CRITERIA
	AO4	Tack and arc weld work pieces incidental to the trade using manual arc weld techniques.	<p>consumables.</p> <p>2. All safety aspects adhered to.</p> <p>1. Correct according to company quality control procedures.</p> <p>2. All safety aspects adhered to.</p>
<b>ELECTRICAL AND ELECTRONIC TEST INSTRUMENTS</b>	ET1	<p>Select and use the following test instruments and interpret the readings:</p> <ul style="list-style-type: none"> <li>- Voltmeter, ammeter, ohmmeter , multimeter (analogue and digital)</li> <li>- wheatstone bridge - analogue or digital</li> <li>- pulse generator</li> <li>- oscilloscope (analogue dual trace up to 20mHZ)</li> <li>- frequency counter</li> <li>- milli-amp source</li> <li>- milli-volt source</li> <li>- capacitance meter analogue and digital</li> <li>- dual power supply 0-30 volt 3 amp (with current limiting)</li> </ul>	<p>1. Application according to manufacturer's specification.</p> <p>2. All readings to be within 2% of true values.</p> <p>3. No error of parallax in analogue instruments permitted.</p>
<b>THERMOCOUPLES AND RESISTANCE BULBS</b>	TC1	Recall the laws as regards temperature Peltier effect; Seebeck effect; Thompson effect; Intermediate temperatures: Intermediate metals and cold junction.	1. Pass a questionnaire with at least 80%.
	TC2	Recall the application of the different type of thermocouples and resistance bulbs.	1. Application of thermocouples correctly stated in terms of ANCI standards.
	TC3	Identify the different types of thermocouples and resistance bulbs and their respective compensating leads.	1. Thermocouples identified to correct application in terms of ISO standards.
<b>SOLDERING AND DE-SOLDERING</b>	SS1	Solder electronic components onto a PC board.	<p>1. No dry joints.</p> <p>2. No damage to components, tracks or PC board.</p> <p>3. No solder bridges.</p> <p>4. Solder height not to exceed 1mm.</p>
	SS2	Prepare soft solder parts.	1. Joints to be electrically and mechanically sound.
	SS3	Use various grades and types of solder and electric soldering irons, including low voltage and thermostatically controlled types.	1. Soldering iron selected according to type of job.

MODULE	CODE	OBJECTIVES	CRITERIA
	SS4	De-solder electronic components from PC boards.	1. No damage to components or PC boards.
<b>PNEUMATIC COMPONENTS AND INSTALLATIONS</b>	PCI1	Identify various pneumatic components.	1. All pneumatic components relating to basic pneumatic control circuits excluding logics.
	PCI2	Apply various basic components to form different installations.	1. Correct according to manufacturers' specifications.
	PCI3	Test various basic components.	1. Correct according to manufacturers' specifications.
<b>ELECTRONIC EQUIPMENT</b>	EQ1	Identify types of protection and interference suppression.	1. Correct according to manufacturers' specifications with reference to abnormal temperature, humidity, over current, over voltage and static electricity.
<b>CONTROL VALVES AND POSITIONERS</b>	CV1	Calibrate all types of control valves and power cylinders and their positioners.	1. Correct according to manufacturers' specifications (NB difference between air to open and air to close).
<b>ELECTRONICS</b>	EL1	Identify the following electronic components: Resistors ( wire wound up to 10 watts, and carbon and metal oxides (1 watt)), Capacitors (electrolytic and ceramic), Diodes, Transistors, Thyristors, Integrated circuits	1. 100% correct to manufacturers' specifications.
	EL2	Construct, solder and fault find the following electronic circuits: Bi-stable, A-stable, Mono-stable multi vibrator, Class A amplifier, elementary SCR speed control.	1. All circuits to operate functionally correct.
	EL3	Programme and use P.L.C. systems.	1. According to company requirements and manufacturer's specifications.
<b>ELECTRICAL, ELECTRONIC AND PNEUMATIC APPLICATIONS</b>	EEP1	Design a single variable flow level and pressure control loop using a differential pressure transmitter, controller recorder and control valve.	1. 100% correct according to design specifications. 2. Design to be functionally correct.
	EEP2	Design a cascade and ratio control loop using differential pressure transmitters, controllers, recorder and control valve. (Pneumatic and or electronic optional square extractor).	1. 100% correct according to design specifications. 2. Design to be functionally correct.
	EEP3	Assemble electrical, electronic and pneumatic modules to form a control loop.	1. According to company standards.

MODULE	CODE	OBJECTIVES	CRITERIA
	EEP4	Fault find on the different electrical, electronic and pneumatic modules in the control loop.	1. Follow a logical fault finding sequence with minimum disruption to the process.
	EEP5	Tune parameters of the instrument control loop.	1. Obtain ¼ wave amplitude dampening.
	EEP6	Design an interlocking system using the following: <ul style="list-style-type: none"> <li>– Pressure switches</li> <li>– Flow switches</li> <li>– Limit switches</li> <li>– Level switches and</li> <li>– Solenoid valve</li> </ul>	1. According to company specifications, requirements and standards.
	EEP7	Distributed control systems.	1. According to company specifications, requirements and standards.
<b>MICRO PROCESSORS</b>	MP1	Recall the basic functional blocks of a microprocessor with reference to the bus systems keyboard, I/O parts, registers, memory and CPU.	1. Pass a questionnaire with at least 80%.
<b>SENSORS AND TRANSMITTERS</b>	SN1	Test sensors and transmitters used for pressure; temperature; level; load cell and flow.	1. Correct according to manufacturers' specifications.
	SN2	Repair and or replace sensors and transmitters used for pressure; temperature; level; load cell and flow.	1. Correct according to manufacturers' specifications.
	SN3	Calibrate sensors and transmitters used for pressure; temperature; level; load cell and flow.	1. Correct according to manufacturers' specifications.
<b>INSTRUMENT MAINTENANCE</b>	INM1	Test recording, indication and control instruments.	1. Correct according to manufacturers' specifications and calibration sheets.
	INM2	Align recording, indicating and control instruments.	1. Correct according to manufacturers' specifications and calibration sheets.
	INM3	Calibrate recording, indicating and control instruments.	1. Correct according to manufacturers' specifications and calibration sheets and lock all adjustments.
<b>CABLES</b>	CA1	Mark off and join multi and single core, stranded PVC armoured cable up to 16mm <sup>2</sup> 4 core, 1200 volt insulation.	1. Glands, ferrules and lugs used to be correct according to manufacturer's specification. 2. Joint to be electrically and mechanically sound and according to

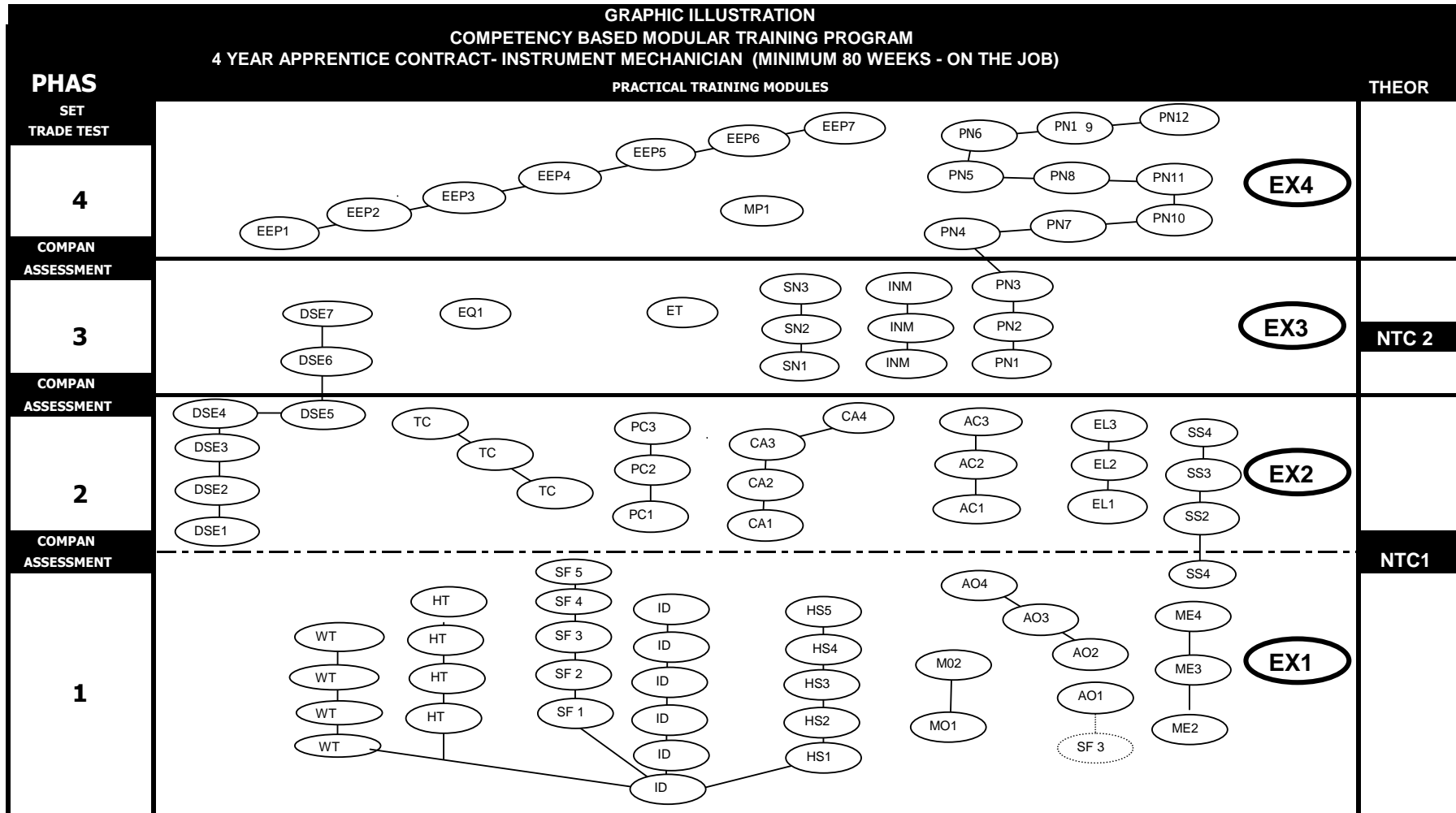
MODULE	CODE	OBJECTIVES	CRITERIA
	CA2	Identify ratings of cables by current, voltage and temperature.	manufacturers' specifications. 1. Correct according to SABS 0142.
	CA3	Recall methods of storing cables.	1. Correct according to SABS 0142.
	CA4	Terminate PVC cables (up to 1200 volt insulation) for entry into a cable end box using mechanical and compression methods.	1. Correct according to SABS 0142.
<b>AC MACHINES</b>	AC1	Connect the following AC machines: – single phase induction motors – 3 phase slip ring induction motors – 3 phase squirrel cage induction motors – Alternators, transformers	1. Rotation 100% correct. 2. Correct according to SABS 0142. 3. All connections electrically and mechanically sound.
	AC2	Test the following AC machines: – single phase induction motors – 3 phase slip ring induction motors – 3 phase squirrel cage induction motors – Alternators, transformers	1. Correct according to SABS 0142 test procedures. 2. All connections electrically and mechanically sound.
	AC3	Fault find the following AC machines: – single phase induction motors – 3 phase slip ring induction motors – 3 phase squirrel cage induction motors – Alternators, transformers	1. All faults recorded and repaired according to SABS 0142 and manufacturers' specifications.
<b>PNEUMATICS</b>	PN1	Interpret symbols and abbreviations.	1. 100% correct according to ISO 1219 standards.
	PN2	Interpret pneumatic circuit diagrams.	1. 100% correct according to ISO 1219 standards.
	PN3	Identify compressed air pipelines.	1. Colour according to SABS 0140, part 3.

MODULE	CODE	OBJECTIVES	CRITERIA
	PN4	Install, replace and maintain compressed air pipelines.	<ol style="list-style-type: none"> <li>1. Ring main gradient - 2° in direction of air flow.</li> <li>2. All outlets to exit at top of main pipe.</li> <li>3. No air leaks.</li> </ol>
	PN5	Install, replace and maintain air service units.	<ol style="list-style-type: none"> <li>1. Sealing tape used.</li> <li>2. No air leaks.</li> <li>3. Inlet and outlet direction 100% correct.</li> <li>4. No cracks in collector bowls.</li> </ol>
	PN6	Install, replace and maintain cylinders.	<ol style="list-style-type: none"> <li>1. No damage to components.</li> <li>2. No air leaks.</li> <li>3. No dirt contamination.</li> <li>4. No score marks and ridges in barrel.</li> </ol>
	PN7	Install, replace and maintain directional control, flow control and pressure valves	<ol style="list-style-type: none"> <li>1. No air leaks.</li> <li>2. Pressure relieved to fail safe.</li> <li>3. No damage to equipment.</li> <li>4. No dirt contamination in components.</li> </ol>
	PN8	Install, replace and maintain vane and position type motors.	<ol style="list-style-type: none"> <li>1. No dirt contamination components.</li> </ol>
	PN9	Service and set safety valves.	<ol style="list-style-type: none"> <li>1. No damage to components.</li> <li>2. Blow-off pressure set at 5% of working pressure.</li> </ol>
	PN10	Recall the service procedure for air receivers.	<ol style="list-style-type: none"> <li>1. According to the applicable regulations of the Occupational Safety Act.</li> </ol>
	PN11	Service air compressors.	<ol style="list-style-type: none"> <li>1. According to the applicable regulations of the Occupational Safety Act.</li> </ol>
	PN12	Diagnose and rectify faults in pneumatic systems.	<ol style="list-style-type: none"> <li>1. Adhered to fail safe procedures.</li> <li>2. No loss in air flow.</li> <li>3. All valves set to pre-set pressure.</li> <li>4. All quick-release couplings coupled safely.</li> <li>5. Flow sequence 100% correct.</li> </ol>

MODULE	CODE	OBJECTIVES	CRITERIA
			6. No air leakage.
<b>THEORETICAL TRAINING</b>		<p>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.</p> <p>Mathematics N1  Relevant Trade Theory N1  Plus two relevant subjects N1</p> <p>Mathematics N2  Relevant Trade Theory N2  Plus two relevant subjects N2</p> <p>TT1 Relevant Trade Theory N1</p> <p>TT2 Relevant Trade Theory N2  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.</p>	1. Obtain a four subject certificate or equivalence
<b>ON-THE-JOB EXPERIENCE AND INDEPENDENT WORK</b>	EX1	<p>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 supervisory control.  This must be at least 80 weeks.</p>	1. All work done to be recorded with respect to performance levels.
<b>TRAINING PROVIDER</b>	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.



Part2 COURSE MAP



Part 3 EXAMPLE OF THE LAYOUT OF AN INDIVIDUAL TRAINING PROGRAMME

Apprentice Name		Contract Number		Trade: Instrument Mechanician		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
<b>Activity:</b> <i>Induction Course</i> <b>Venue:</b> <i>Company training Room</i> <b>Code</b> <i>ID 1</i> <i>ID2</i> <i>ID3</i> <i>ID4</i> <i>ID5</i> <i>ID6</i> <i>ID</i> <i>assessment test</i>	<b>Activity:</b> <i>xxx</i> <b>Venue:</b> <i>place</i> <b>Code</b> <i>XX1</i>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>
<b>Activity:</b>  <b>Venue:</b>  <b>Code</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>	<b>Activity:</b>  <b>Venue:</b>  <b>Code:</b>
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Part 4 APPRENTICESHIP TRAINING RECORD

<b>APPRENTICE TRAINING RECORD</b>						<b>PAGE 1-2</b>		<b>TRADE : INSTRUMENT MECHANICIAN</b>					
<b>EMPLOYER:</b>								<b>CONTRACT NO:</b>					
<b>APPRENTICE SURNAME &amp; INITIALS:</b>													
<b>I.D. NUMBER:</b>													
<b>CONFIRMATION OF TRAINING PRESENTED</b>													
<b>MODULE AND MODULE CODE</b>				<b>PHASE 1</b>				<b>MODULE AND MODULE CODE</b>					
<b>CODE</b>		<b>SIGNATURE</b>			<b>DATE</b>		<b>CODE</b>		<b>SIGNATURE</b>			<b>DATE</b>	
		<b>APPRENTICE</b>	<b>EMPLOYER/ PROVIDER</b>						<b>APPRENTICE</b>	<b>EMPLOYER/ PROVIDER</b>			
P= Provider E Employer													
<b>INDUCTION / MODULE 1</b>						<b>MATERIALS / MODULE 5</b>							
ID1	P					ME2	P						
	E						E						
ID2	P					ME3	P						
	E						E						
ID3	P					ME4	P						
	E						E						
ID4	P					<b>MARKING OFF / MODULE 7</b>							
	E												
ID5	P					MO1	P						
	E						E						
ID6	P					MO9	P						
	E						E						
<b>SAFETY / MODULE 2</b>						<b>HAND SKILLS / MODULE 8</b>							
SF1	P					HS1	P						
	E						E						
SF2	P					HS3	P						
	E						E						
SF3	P					HS4	P						
	E						E						
SF4	P					HS5	P						
	E						E						
SF5	P					HS7	P						
	E						E						

HAND TOOLS / MODULE 3					SOLDERING AND DE-SOLDERING / MODULE 12				
HT1	P				SS4	P			
	E					E			
HT2	P				<b>ARC WELDING / MODULE 9</b>				
	E								
HT3	P				AO1	P			
	E					E			
HT4	P				AO2	P			
	E					E			
<b>WORKSHOP TOOLS / MODULE 4</b>					AO3	P			
						E			
WT1	P				AO4	P			
	E					E			
WT3	P				<b>THEORETICAL TRAINING</b>				
	E								
WT2	P				NTC1				
	E								
WT4	P				<b>PHASE 1 COMPANY TEST</b>				
	E								
<b>AFTER APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 1 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA</b>									

<b>APPRENTICE TRAINING RECORD</b>					<b>PAGE 1-2</b>		<b>TRADE : INSTRUMENT MECHANICIAN</b>		
<b>EMPLOYER:</b>							<b>CONTRACT NO:</b>		
<b>APPRENTICE SURNAME &amp; INITIALS:</b>									
<b>I.D. NUMBER:</b>									
<b>CONFIRMATION OF TRAINING PRESENTED</b>									
<b>MODULE AND MODULE CODE</b>			<b>PHASE 2</b>				<b>MODULE AND MODULE CODE</b>		
<b>CODE</b>	<b>SIGNATURE</b>		<b>DATE</b>	<b>CODE</b>	<b>SIGNATURE</b>		<b>DATE</b>		
	APPRENTICE	EMPLOYER/ PROVIDER			APPRENTICE	EMPLOYER/ PROVIDER			
P= Provider E Employer									
<b>SOLDERING AND DE-SOLDERING / MODULE 12</b>					<b>ELECTRONICS / MODULE 16</b>				
SS1	P				EL1	P			
	E					E			
SS3	P				EL2	P			
	E					E			
SS4	P				EL3	P			
	E					E			
<b>DRAWINGS AND SKETCHES / MODULE 6</b>					<b>CABLES / MODULE 21</b>				
DSE 1	P				CA1	P			
	E					E			
DSE 2	P				CA2	P			
	E					E			
DSE 3	P				CA3	P			
	E					E			
DSE 4	P				CA4	P			
	E					E			
DSE 5	P				<b>A C MACHINES / MODULE 22</b>				
	E								
<b>THERMOCOUPLES AND RESISTANCE BULBS / MODULE 11</b>					AC1	P			
						E			
TC1	P				AC2	P			
	E					E			
TC2	P				AC3	P			
	E					E			

TC3	P							
	E							
<b>PNEUMATIC COMPONENTS AND INSTALLATIONS / MODULE 13</b>					<b>PHASE 2 COMPANY TEST</b>			
PCI1	P				<b>WORKPLACE EXPERIENCE</b>			
	E							
PCI2	P				EX1			
	E							
PCI3	P				EX2			
	E							
<b>AFTER APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 2 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA</b>								

APPRENTICE TRAINING RECORD					PAGE 1-2		TRADE : INSTRUMENT MECHANICIAN		
EMPLOYER:							CONTRACT NO:		
APPRENTICE SURNAME & INITIALS:									
I.D. NUMBER:									
CONFIRMATION OF TRAINING PRESENTED									
MODULE AND MODULE CODE			PHASE 3				MODULE AND MODULE CODE		
CODE	SIGNATURE		DATE	CODE	SIGNATURE		DATE		
	APPRENTICE	EMPLOYER/ PROVIDER			APPRENTICE	EMPLOYER/ PROVIDER			
P= Provider E Employer									
DRAWINGS AND SKETCHES / MODULE 6				PN2	P				
					E				
DSE 6	P				PN3	P			
	E					E			
DSE 7	P				THEORETICAL TRAINING				
	E								
ELECTRONIC EQUIPMENT / MODULE 14				NTC2					
EQ1	P								
	E								
CONTROL VALVES AND POSITIONERS / MODULE 15									
CV1	P				PHASE 3 COMPANY TEST				
	E								
ELECTRICAL AND ELECTRONIC TEST INSTRUMENTS / MODULE 10									
ET3	P								
	E								
SENSORS AND TRANSMITTERS / MODULE 19				WORKPLACE EXPERIENCE					
SN1	P				EX3				
	E								
SN2	P								
	E								
SN3	P								
	E								

INSTRUMENT MAINTENANCE / MODULE 20								
INM1	P				INSERT COMPANY RUBBER STAMP			
	E							
INM2	P							
	E							
INM3	P							
	E							
PNEUMATICS / MODULE 23								
PN1	P							
	E							
AFTER APPRENTICE HAS SUCCESSFULLY COMPLETED PHASE 3 A COPY OF THIS TRAINING RECORD MUST BE FORWARDED TO THE APPRENTICESHIP UNIT OF THE CHIETA								

<b>APPRENTICE TRAINING RECORD</b>					<b>PAGE 1-2</b>		<b>TRADE :</b> <b>INSTRUMENT MECHANICIAN</b>	
<b>EMPLOYER:</b>						<b>CONTRACT NO:</b>		
<b>APPRENTICE SURNAME &amp; INITIALS:</b>								
<b>I.D. NUMBER:</b>								
<b>CONFIRMATION OF TRAINING PRESENTED</b>								
<b>MODULE AND MODULE CODE</b>			<b>PHASE 4</b>			<b>MODULE AND MODULE CODE</b>		
<b>CODE</b>	<b>SIGNATURE</b>		<b>DATE</b>	<b>CODE</b>	<b>SIGNATURE</b>		<b>DATE</b>	
	<b>APPRENTICE</b>	<b>EMPLOYER/ PROVIDER</b>			<b>APPRENTICE</b>	<b>EMPLOYER/ PROVIDER</b>		
P= Provider E Employer								
<b>ELECTRICAL, ELECTRONIC AND PNEUMATIC APPLICATIONS / MODULE 17</b>				<b>ON THE JOB EXPERIENCE AND INDEPENDENT WORK</b>				
EEP 1	P			EX1				
	E							
EEP 2	P							
	E							
EEP 3	P			EX2				
	E							
EEP 4	P			EX3				
	E							
EEP 5	P			EX4				
	E							
EEP 6	P			<b>INSERT COMPANY RUBBER STAMP</b>				
	E							
EEP 7	P							
	E							
<b>MICROPROCESSORS / MODULE 18</b>								
MP1	P							
	E							
<b>PNEUMATICS / MODULE 23</b>								
PN1 4	P							
	E							
PN1 5	P							
	E							

PN1 6	P							
	E							
PN1 7	P							
	E							
PN1 8	P							
	E							
PN9	P							
	E							
PN1 0	P							
	E							
PN1 1	P							
	E							
PN1 2	P							
	E							

**AFTER 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 TRADE TEST**

***REMEMBER TO APPLY FOR YOUR TRADE TEST***