

RPL Clusters for Testing, Inspection and Certification Industry

	RPL Cluster (Name & Code)	QF Level	UoC Codes	Unit of Competency	Years of Working Experiences and Relevant experiences	Proposed Form of Assessment and Fee
1	Measurement Uncertainty (Chemical Testing) (TCTE001L4)	4	105768L4	Estimate and report measurement uncertainty	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105871L4	Apply statistical calculations to measurement data		
2	Measurement Uncertainty (Microbiological Testing) (TCTE002L4)	4	105768L4	Estimate and report measurement uncertainty	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105871L4	Apply statistical calculations to measurement data		
3	Measurement Uncertainty (Physical Testing) (TCTE003L4)	4	105768L4	Estimate and report measurement uncertainty	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience	Written Test + Interview (\$1200)
		4	105871L4	Apply statistical calculations to measurement data		

					in related field)	
4	Sample Handling (TCTE004L3)	3	105777L3	Pre-condition test samples	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Written Test + Interview (\$1200)
		3	105778L3	Handle and transport samples		
		3	105986L3	Prepare samples for testing		
5	Sampling and Sample Handling (TCTE005L4)	4	105772L4	Obtain representative samples in accordance with sampling plan	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105773L4	Apply statistical techniques in sampling		
		4	105775L4	Establish procedures for handling of test / inspection items and samples		
6	Basic Laboratory Preparation Work (TCTE006L2)	2	105774L2	Collect routine site samples	Three years' relevant experience in Testing, Inspection and Certification Industry (including one year of experience in related field)	Interview (\$890)
		2	105776L2	Receive samples		
		2	105987L2	Conduct laboratory / field work		
		2	105988L2	Maintain laboratory / workplace fit for purpose		
		2	105799L2	Apply cleansing methods for labware		
7	Basic Microbiological Laboratory Preparation Work (TCTE007L2)	2	105774L2	Collect routine site samples	Three years' relevant experience in Testing, Inspection and Certification	Interview (\$890)
		2	105776L2	Receive samples		
		2	105987L2	Conduct laboratory / field work		
		2	105988L2	Maintain laboratory /		

				workplace fit for purpose	Industry (including one year of experience in related field)	
		2	105992L2	Apply cleansing methods for microbiological testing labware		
8	Chemical Testing (Elemental Analysis) (TCTE008L3)	3	105791L3	Perform basic chemical tests and procedures	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Practical Assessment + Interview (\$3500)
		3	105794L3	Apply sample treatment techniques to chemical testing		
		3	105795L3	Prepare standard solutions		
		3	105796L3	Prepare working solutions and reagents		
		3	105797L3	Prepare laboratory materials, equipment and facilities for chemical testing		
		3	105798L3	Handle chemicals, solutions and reagents		
		3	105973L3	Maintain laboratory / field workplace safety		
9	Chemical Testing (Elemental Analysis – Atomic Spectrometric Techniques) (TCTE009L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105785L4	Apply atomic spectrometric techniques to chemical testing		
		4	105790L4	Perform complex tests to measure chemical properties of materials		
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105971L4	Handle and dispose of chemical wastes		
10	Chemical Testing (Elemental	3	105873L3	Record and present data	Six years' relevant	Practical Assessment

	Analysis – Inductively Coupled Plasma Spectroscopic Techniques) (TCTE010L4)	4	105786L4	Apply inductively coupled plasma spectroscopic techniques to chemical testing	experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	+ Written Test (\$5200)
		4	105790L4	Perform complex tests to measure chemical properties of materials		
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105971L4	Handle and dispose of chemical waste		
11	Chemical Testing (Organic Analysis) (TCTE011L3)	3	105791L3	Perform basic chemical tests and procedures	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Practical Assessment + Interview (\$3500)
		3	105792L3	Apply separation and cleanup techniques to organic analysis		
		3	105793L3	Apply extraction techniques to organic analysis		
		3	105795L3	Prepare standard solutions		
		3	105796L3	Prepare working solutions and reagents		
		3	105797L3	Prepare laboratory materials, equipment and facilities for chemical testing		
		3	105973L3	Maintain laboratory / field workplace safety		
		3	105798L3	Handle chemicals, solutions and reagents		
12	Chemical Testing (Organic Analysis – Chromatographic Techniques) (TCTE012L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification	Practical Assessment + Written Test (\$5200)
		4	105871L4	Apply statistical calculations to measurement data		
		4	105784L4	Apply chromatographic		

				techniques to chemical testing	Industry (including three years of experience in related field)	
		4	105790L4	Perform complex tests to measure chemical properties of materials		
		4	105971L4	Handle and dispose of chemical wastes		
		4	105872L4	Process data		
13	Chemical Testing (Organic Analysis – Molecular Spectrometric Techniques) (TCTE013L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105871L4	Apply statistical calculations to measurement data		
		4	105787L4	Apply molecular spectrometric techniques to chemical testing		
		4	105790L4	Perform complex tests to measure chemical properties of materials		
		4	105971L4	Handle and dispose of chemical wastes		
		4	105872L4	Process data		
14	Biological / Microbiological Testing Preparation (TCTE014L3)	3	105806L3	Prepare biological samples	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Practical Assessment + Interview (\$3500)
		3	105807L3	Prepare microbiological samples		
		3	105808L3	Perform sterilisation and aseptic techniques		
		3	105809L3	Prepare culture media and solutions		
		3	105810L3	Follow bio-safety rules and precautions		
		3	105811L3	Prepare equipment and facilities for biological / microbiological testing		
15	Biological / Microbiological	3	105873L3	Record and present data	Six years' relevant	Practical Assessment

	Testing (TCTE015L4)	4	105802L4	Perform microbiological tests	experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	+ Written Test (\$5200)
		4	105803L4	Perform biological and biochemical tests		
		4	105804L4	Perform microscopic examination		
		4	105805L4	Perform staining techniques		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105872L4	Process data		
16	Environmental Testing (Microbiological) (TCTE016L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105814L4	Perform environmental testing (microbiological)		
		4	105802L4	Perform microbiological tests		
		4	105804L4	Perform microscopic examination		
		4	105805L4	Perform staining techniques		
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
17	Environmental Testing (Physical) (TCTE017L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105815L4	Perform environmental testing (physical)		
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		

18	Physical and Mechanical Testing (On-site Concrete Sampling and Testing) (TCTE052L3)	3	105846L3	Perform sampling and basic field tests on fresh concrete and on-site curing on concrete cubes	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Practical Assessment + Interview (\$3500)
		3	105973L3	Maintain laboratory / field workplace safety		
		3	105873L3	Record and present data		
		4	105961L4	Implement ethical practices		
19	Physical and Mechanical Testing (Concrete and Its Constituent Materials) (TCTE053L3)	3	105837L3	Perform physical and mechanical tests on concrete and its constituent materials	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Practical Assessment + Interview (\$3500)
		3	105845L3	Perform basic physical and mechanical tests		
		3	105973L3	Maintain laboratory / field workplace safety		
		3	105873L3	Record and present data		
		4	105961L4	Implement ethical practices		
20	Physical and Mechanical Testing (Mortar and Grout) (TCTE054L3)	3	105839L3	Perform physical and mechanical tests on mortar and grout	Five years' relevant experience in Testing, Inspection and Certification Industry (including two years of experience in related field)	Practical Assessment + Interview (\$3500)
		3	105845L3	Perform basic physical and mechanical tests		
		3	105973L3	Maintain laboratory / field workplace safety		
		3	105873L3	Record and present data		

		4	105961L4	Implement ethical practices		
21	Physical and Mechanical Testing (Soil and Rock) (TCTE055L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Interview (\$5200)
		4	105872L4	Process data		
		4	105835L4	Perform basic physical and mechanical tests on soil and rock		
		3	105845L3	Perform basic physical and mechanical tests		
		3	105973L3	Maintain laboratory/field workplace safety		
		4	105961L4	Implement ethical practices		
22	Physical and Mechanical Testing (Bituminous Materials) (TCTE056L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Interview (\$5200)
		4	105872L4	Process data		
		4	105838L4	Perform physical and mechanical tests on bituminous materials		
		3	105973L3	Maintain laboratory/field workplace safety		
		4	105961L4	Implement ethical practices		
23	Physical and Mechanical Testing (Basic Structural Diagnostic Tests on Concrete Structures) (TCTE057L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including	Practical Assessment + Interview (\$5200)
		4	105872L4	Process data		
		4	105842L4	Perform basic structural diagnostic tests on concrete structures		

		3	105973L3	Maintain laboratory/field workplace safety	three years of experience in related field)	
		4	105961L4	Implement ethical practices		
24	Chemical Testing on Construction Materials (TCTE058L4)	3	105791L3	Perform basic chemical tests and procedures	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	Practical Assessment + Written Test (\$5200)
		3	105845L3	Perform basic physical and mechanical tests		
		3	105873L3	Record and present data		
		3	105973L3	Maintain laboratory/field workplace safety		
		4	105788L4	Perform chemical tests on construction materials		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105872L4	Process data		
		4	105961L4	Implement ethical practices		
25	Physical and Mechanical Testing (Toys and Hardlines - Flammability Tests) (TCTE025L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		

		4	105851L4	Perform flammability tests (toys and hardlines)	three years of experience in related field)	
26	Physical and Mechanical Testing (Toys and Hardlines – Stability and Construction) (TCTE026L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105852L4	Perform stability, physical and mechanical tests		
		4	105853L4	Evaluate the construction of products by visual inspection (consumer products)		
27	Physical and Mechanical Testing (Toys – Acoustic Measurement) (TCTE027L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105854L4	Perform acoustic measurements (consumer products)		
28	Fabric Construction Tests (Textiles and Garment Products) (TCTE028L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105856L4	Perform fabric construction tests		

					of experience in related field)	
29	Fabric Strength and Performance Tests (Textiles and Garment Products) (TCTE029L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105857L4	Perform fabric strength and performance tests		
30	Care Performance Tests (Textiles and Garment Products) (TCTE030L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105859L4	Perform care performance tests		
31	Colour Fastness Tests (Textiles and Garment Products) (TCTE031L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105860L4	Perform colour fastness tests		
32	Flammability Tests (Textiles	3	105873L3	Record and present data	Six years' relevant experience	Practical Assessment + Written
		4	105872L4	Process data		

	and Garment Products) (TCTE032L4)	4	105871L4	Apply statistical calculations to measurement data	in Testing, Inspection and Certification Industry (including three years of experience in related field)	Test (\$5200)
		4	105861L4	Perform flammability tests (textiles and garments)		
33	Fibre Analysis (Textiles and Garment Products) (TCTE033L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105858L4	Perform fibre analysis		
34	Garment Trim Tests (Textiles and Garment Products) (TCTE034L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105863L4	Perform garment trim tests		
35	Feather and Down Analysis (TCTE035L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105862L4	Perform feather and down analysis		

					experience in related field)	
36	Performance Tests (Footwear) (TCTE036L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105864L4	Perform footwear tests		
37	Electrical and Electronic Safety Testing (Electric Shock and Energy Hazard Tests) (TCTE037L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105820L4	Perform electric shock and energy hazard tests		
38	Electrical and Electronic Safety Testing (Electrical Insulation Tests) (TCTE038L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105821L4	Evaluate electrical insulation properties by electrical measurements		
		4	105822L4	Evaluate electrical insulation properties by physical measurements		
39	Electrical and Electronic Safety Testing	3	105873L3	Record and present data	Six years' relevant experience	Practical Assessment + Written
		4	105872L4	Process data		

	(Electrical Products – Construction Evaluation) (TCTE039L4)	4	105871L4	Apply statistical calculations to measurement data	in Testing, Inspection and Certification Industry (including three years of experience in related field)	Test (\$5200)
		4	105848L4	Evaluate the construction of products by visual inspection (electrical products)		
40	Electrical and Electronic Safety Testing (Thermal Hazard and Flammability Tests) (TCTE040L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105825L4	Perform thermal hazard related tests		
		4	105826L4	Perform flammability tests (electrical and electronic products)		
41	Electrical and Electronic Safety Testing (Stability and Mechanical Tests) (TCTE041L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105847L4	Perform stability and mechanical tests		
42	Physical and Mechanical Testing (Electrical Products – Acoustic Measurement) (TCTE042L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of	Practical Assessment + Written Test (\$5200)
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
		4	105849L4	Perform acoustic Measurements (electrical products)		

					experience in related field)	
43	Electrical and Electronic Testing (Energy Efficiency) (TCTE043L4)	3	105873L3	Record and present data	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Practical Assessment + Written Test (\$5200)
		4	105823L4	Evaluate energy efficiency of electrical and electronic products		
		4	105872L4	Process data		
		4	105871L4	Apply statistical calculations to measurement data		
44	Testing Quality Assurance (TCTE044L4)	4	105878L4	Implement laboratory quality control procedures	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105879L4	Control reference materials and working standards		
		4	105880L4	Verify critical consumables		
		4	105904L4	Implement corrective actions for testing services		
		4	105905L4	Implement preventive actions for testing services		
45	Measurement Traceability (Chemical Testing) (TCTE045L4)	4	105890L4	Verify and maintain reference materials	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105892L4	Handle and perform equipment calibration		
46	Measurement Traceability	4	105891L4	Verify and maintain reference and working cultures	Six years' relevant experience in Testing,	Written Test + Interview (\$1200)

	(Microbiological Testing) (TCTE046L4)	4	105892L4	Handle and perform equipment calibration	Inspection and Certification Industry (including three years of experience in related field)	
47	Measurement Traceability (Physical Testing) (TCTE047L4)	4	105889L4	Calibrate and maintain reference standards	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105892L4	Handle and perform equipment calibration		
48	Inspection of Consumer Products (TCIN048L4)	3	105914L3	Prepare work documents for conducting inspection	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		3	105919L3	Record inspection observations and findings		
		4	105911L4	Identify equipment and resources requirement for conducting inspection		
		4	105912L4	Identify items and samples for inspection		
		4	105913L4	Define defect classification and acceptance criteria		
		4	105916L4	Perform on-site inspection of production processes / delivery of services		
		4	105917L4	Inspect items and samples		

		4	105918L4	Perform compliance inspection on materials		
49	Inspection of Waterworks Products (TCIN049L4)	3	105914L3	Prepare work documents for conducting inspection	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		3	105919L3	Record inspection observations and findings		
		4	105911L4	Identify equipment and resources requirement for conducting inspection		
		4	105912L4	Identify items and samples for inspection		
		4	105913L4	Define defect classification and acceptance criteria		
		4	105916L4	Perform on-site inspection of production processes / delivery of services		
		4	105917L4	Inspect items and samples		
		4	105918L4	Perform compliance inspection on materials		
50	Quality Assurance of Inspection Operation (TCIN050L4)	4	105921L4	Implement inspection quality control procedures	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105930L4	Implement corrective actions and preventive actions for inspection services		

51	Occupational Safety and Health (TCOM051L4)	4	105964L4	Monitor environmentally sustainable work practices	Six years' relevant experience in Testing, Inspection and Certification Industry (including three years of experience in related field)	Written Test + Interview (\$1200)
		4	105969L4	Implement occupational safety and health supervision		
		4	105970L4	Monitor occupational safety and health system		
		4	105972L4	Identify hazards associated with testing / inspection / certification activities		
52	Physical and Mechanical Testing (Steel) (TCTE059L4)	3	105845L3	Perform basic physical and mechanical tests	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	Practical Assessment + Interview (\$5200)
		3	105873L3	Record and present data		
		3	105973L3	Maintain laboratory / field workplace safety		
		4	105836L4	Perform physical and mechanical tests on steel		
		4	105872L4	Process data		
		4	105961L4	Implement ethical practices		

Laboratory / On-site Testing

Testing Operations: Measurement Uncertainty

1. Measurement Uncertainty (Chemical Testing) (Level 4)		
Major Competency Standards	Estimate and report measurement uncertainty of chemical test method according to the predetermined procedures.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105768L4	Estimate and report measurement uncertainty
	105871L4	Apply statistical calculations to measurement data

2. Measurement Uncertainty (Microbiological Testing) (Level 4)		
Major Competency Standards	Estimate and report measurement uncertainty of microbiological test method according to the predetermined procedures.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105768L4	Estimate and report measurement uncertainty
	105871L4	Apply statistical calculations to measurement data

3. Measurement Uncertainty (Physical Testing) (Level 4)		
Major Competency Standards	Estimate and report measurement uncertainty of physical test method according to the predetermined procedures.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105768L4	Estimate and report measurement uncertainty
	105871L4	Apply statistical calculations to measurement data

Laboratory / On-site Testing - Testing Operations: Sampling and Sample Handling

4. Sample Handling (Level 3)		
Major Competency Standards	Perform pre-condition, handling and transport of samples in accordance with the standard operating procedures.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105777L3	Pre-condition test samples
	105778L3	Handle and transport samples
	105986L3	Prepare samples for testing
	105836L4	Perform physical and mechanical tests on steel
	105872L4	Process data
	105961L4	Implement ethical practices

5. Sampling and Sample Handling (Level 4)		
Major Competency Standards	Obtain representative samples by applying statistics techniques in sampling and establish procedures for proper and safe handling of test items.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105772L4	Obtain representative samples in accordance with sampling plan
	105773L4	Apply statistical techniques in sampling
	105775L4	Establish procedures for handling of test / inspection items and samples

**Laboratory / On-site Testing -
Testing Operations: Preparation Work**

6. Basic Laboratory Preparation Work (Level 2)		
Major Competency Standards	Carry out basic preparation work in a laboratory for general testing operations.	
Years of Work Experience and Related Job Experience	THREE years' relevant experience in TIC industry (including ONE year's of experience in related field)	
Units of Competency	105774L2	Collect routine site samples
	105776L2	Receive samples
	105987L2	Conduct laboratory / field work
	105988L2	Maintain laboratory / workplace fit for purpose
	105799L2	Apply cleansing methods for labware

7. Basic Microbiological Laboratory Preparation Work (Level 2)		
Major Competency Standards	Carry out basic preparation work in a laboratory for biological / microbiological testing operations.	
Years of Work Experience and Related Job Experience	THREE years' relevant experience in TIC industry (including ONE year's of experience in related field)	
Units of Competency	105774L2	Collect routine site samples
	105776L2	Receive samples
	105987L2	Conduct laboratory / field work
	105988L2	Maintain laboratory / workplace fit for purpose
	105992L2	Apply cleansing methods for microbiological testing labware

**Laboratory / On-site Testing -
Testing Operations: Chemical Testing (Elemental Analysis)**

8. Chemical Testing (Elemental Analysis) (Level 3)		
Major Competency Standards	Prepare standard and working solutions, samples and facilities / equipment for elemental analysis; conduct tests and carry out procedures for chemical testing safely in a laboratory.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105791L3	Perform basic chemical tests and procedures
	105794L3	Apply sample treatment techniques to chemical testing
	105795L3	Prepare standard solutions
	105796L3	Prepare working solutions and reagents
	105797L3	Prepare laboratory materials, equipment and facilities for chemical testing
	105798L3	Handle chemicals, solutions and reagents
	105973L3	Maintain laboratory / field workplace safety

9. Chemical Testing (Elemental Analysis – Atomic Spectrometric Techniques) (Level 4)

Major Competency Standards	Apply atomic spectrometric techniques to carry out elemental analysis in a chemical testing laboratory.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105785L4	Apply atomic spectrometric techniques to chemical testing
	105790L4	Perform complex tests to measure chemical properties of materials
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105971L4	Handle and dispose of chemical wastes

10. Chemical Testing (Elemental Analysis – Inductively Coupled Plasma Spectroscopic Techniques) (Level 4)

Major Competency Standards	Apply inductively coupled plasma spectroscopic techniques to carry out elemental analysis in a chemical testing laboratory.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105786L4	Apply inductively coupled plasma spectroscopic techniques to chemical testing
	105790L4	Perform complex tests to measure chemical properties of materials
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105971L4	Handle and dispose of chemical wastes

**Laboratory / On-site Testing -
Testing Operations: Chemical Testing (Organic Analysis)**

11. Chemical Testing (Organic Analysis) (Level 3)		
Major Competency Standards	Prepare standard and working solutions, samples and facilities / equipment for organic analysis; conduct tests and carry out procedures for chemical testing safely in a laboratory.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105791L3	Perform basic chemical tests and procedures
	105792L3	Apply separation and cleanup techniques to organic analysis
	105793L3	Apply extraction techniques to organic analysis
	105795L3	Prepare standard solutions
	105796L3	Prepare working solutions and reagents
	105797L3	Prepare laboratory materials, equipment and facilities for chemical testing
	105973L3	Maintain laboratory / field workplace safety
	105798L3	Handle chemicals, solutions and reagents

12. Chemical Testing (Organic Analysis – Chromatographic Techniques) (Level 4)		
Major Competency Standards	Apply chromatographic techniques to carry out organic analysis in a chemical testing laboratory.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105871L4	Apply statistical calculations to measurement data
	105784L4	Apply chromatographic techniques to chemical testing
	105790L4	Perform complex tests to measure chemical properties of materials
	105971L4	Handle and dispose of chemical wastes
	105872L4	Process data

13. Chemical Testing (Organic Analysis – Molecular Spectrometric Techniques) (Level 4)		
Major Competency Standards	Apply molecular spectrometric techniques to carry out organic analysis in a chemical testing laboratory.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105871L4	Apply statistical calculations to measurement data
	105787L4	Apply molecular spectrometric techniques to chemical testing
	105790L4	Perform complex tests to measure chemical properties of materials
	105971L4	Handle and dispose of chemical wastes
	105872L4	Process data

**Laboratory / On-site Testing -
Testing Operations: Biological / Microbiological Testing**

14. Biological / Microbiological Testing Preparation (Level 3)		
Major Competency Standards	Prepare culture media and solutions, samples and facilities / equipment for biological / microbiological testing; perform sterilisation and aseptic techniques safely in a laboratory.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105806L3	Prepare biological samples
	105807L3	Prepare microbiological samples
	105808L3	Perform sterilisation and aseptic techniques
	105809L3	Prepare culture media and solutions
	105810L3	Follow bio-safety rules and precautions
	105811L3	Prepare equipment and facilities for biological / microbiological testing

15. Biological / Microbiological Testing (Level 4)		
Major Competency Standards	Perform microbiological tests, biological and biochemical tests as well as microscopic examination in a biological / microbiological testing laboratory.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105802L4	Perform microbiological tests
	105803L4	Perform biological and biochemical tests
	105804L4	Perform microscopic examination
	105805L4	Perform staining techniques
	105871L4	Apply statistical calculations to measurement data
	105872L4	Process data

**Laboratory / On-site Testing -
Testing Operations:**

Environmental Testing

16. Environmental Testing (Microbiological) (Level 4)		
Major Competency Standards	Carry out microbiological tests on environmental samples independently and record accurate test data to evaluate the compliance of environmental samples against relevant regulatory limits.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105814L4	Perform environmental testing (microbiological)
	105802L4	Perform microbiological tests
	105804L4	Perform microscopic examination
	105805L4	Perform staining techniques
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data

17. Environmental Testing (Physical) (Level 4)		
Major Competency Standards	Carry out physical measurements and tests on environmental samples independently and record accurate test data to evaluate the compliance of environmental samples against relevant regulatory limits	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105815L4	Perform environmental testing (physical)
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data

**Laboratory / On-site Testing -
Testing Operations: Construction Materials Testing**

18. Physical and Mechanical Testing (On-site Concrete Sampling and Testing) (Level 3)		
Major Competency Standards	Carry out sampling and basic field tests on fresh concrete and on-site curing on concrete cubes by following prescribed procedures and record reliable test data at testing sites.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105846L3	Perform sampling and basic field tests
	105973L3	Maintain laboratory / field workplace
	105873L3	Record and present data
	105961L4	Implement ethical practices

19. Physical and Mechanical Testing (Concrete and Its Constituent Materials) (Level 3)		
Major Competency Standards	Carry out physical and mechanical tests on concrete and its constituent materials and record test data in testing laboratories.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105837L3	Perform physical and mechanical tests on concrete and its constituent
	105845L3	Perform basic physical and mechanical tests
	105973L3	Maintain laboratory / field workplace safety
	105873L3	Record and present data
	105961L4	Implement ethical practices

20. Physical and Mechanical Testing (Mortar and Grout) (Level 3)		
Major Competency Standards	Carry out physical and mechanical tests on mortar and grout materials, and record accurate test data in testing laboratories.	
Years of Work Experience and Related Job Experience	FIVE years' relevant experience in TIC industry (including TWO years' of experience in related field)	
Units of Competency	105839L3	Perform physical and mechanical tests on mortar and grout
	105845L3	Perform basic physical and mechanical tests
	105973L3	Maintain laboratory / field workplace
	105873L3	Record and present data
	105961L4	Implement ethical practices

21. Physical and Mechanical Testing (Soil and Rock) (Level 4)		
Major Competency Standards	Carry out physical and mechanical tests on soil and rock materials, record and analyse test data in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105835L4	Perform basic physical and mechanical tests on soil and rock
	105973L3	Maintain laboratory/field
	105961L4	Implement ethical practices

22. Physical and Mechanical Testing (Bituminous Materials) (Level 4)		
Major Competency Standards	Carry out physical and mechanical tests on bituminous paving materials and other constituent materials, aggregate and binder, and analyse test data in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105838L4	Perform physical and mechanical tests on bituminous materials
	105973L3	Maintain laboratory/field
	105961L4	Implement ethical practices

23. Physical and Mechanical Testing (Basic Structural Diagnostic Tests on Concrete Structures) (Level 4)		
Major Competency Standards	Carry out basic structural diagnostic tests on concrete structures in the building / infrastructure sites by applying appropriate non-destructive (NDT) techniques and evaluate test data to determine the condition of concrete structures.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105842L4	Perform basic structural diagnostic tests on concrete structures
	105973L3	Maintain laboratory/field
	105961L4	Implement ethical practices

24. Chemical Testing on Construction Materials (Level 4)

Major Competency Standards	Carry out chemical tests on construction materials by applying knowledge of analytical chemistry, record accurate test data and conclude test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105791L3	Perform basic chemical tests and procedure
	105845L3	Perform basic physical and mechanical tests
	105873L3	Record and present data
	105788L4	Perform chemical tests on construction materials
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105971L4	Handle and dispose of chemical wastes
	105973L3	Maintain laboratory/field workplace safety
	105961L4	Implement ethical practices

**Laboratory / On-site Testing -
Testing Operations:**

Physical and Mechanical Testing (Toys and Hardlines)

25. Physical and Mechanical Testing (Toys and Hardlines - Flammability Tests)) (Level 4)		
Major Competency Standards	Carry out flammability tests on toys and hardlines products and record accurate test data and observations to judge the compliance of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105851L4	Perform flammability tests (toys and hardlines)

26. Physical and Mechanical Testing (Toys and Hardlines – Stability and Construction) (Level 4)		
Major Competency Standards	Carry out stability tests and evaluate the marking and construction requirements on toys and hardlines products.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105852L4	Perform stability, physical and mechanical tests
	105853L4	Evaluate the construction of products by visual inspection (consumer products)

27. Physical and Mechanical Testing (Toys – Acoustic Measurement) (Level 4)		
Major Competency Standards	Carry out acoustic measurements on toys and/or other consumer products independently by applying suitable testing equipment and conclude test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105854L4	Perform acoustic measurements (consumer products)

**Laboratory / On-site Testing -
Testing Operations:**

Textiles and Garment Products Testing

28. Fabric Construction Tests (Textiles and Garment Products) (Level 4)		
Major Competency Standards	Carry out suitable fabric construction tests on textile and garment products independently, record accurate test data and determine the fabric construction of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105856L4	Perform fabric construction tests

29. Fabric Strength and Performance Tests (Textiles and Garment Products) (Level 4)		
Major Competency Standards	Carry out suitable fabric strength and performance tests on textile and garment products independently, record accurate test data and determine the fabric construction of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105857L4	Perform fabric strength and performance tests

30. Care Performance Tests (Textiles and Garment Products) (Level 4)

Major Competency Standards	Carry out suitable care performance tests on textile and garment products independently, record accurate test data and judge test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105859L4	Perform care performance tests

31. Colour Fastness Tests (Textiles and Garment Products) (Level 4)

Major Competency Standards	Carry out colour fastness tests on textile and garment products independently, record accurate test data and judge test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105860L4	Perform colour fastness tests

32. Flammability Tests (Textiles and Garment Products) (Level 4)

Major Competency Standards	Carry out suitable flammability tests on textile and garment products independently, record accurate test data and judge the compliance of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105861L4	Perform flammability tests (textiles and garments)

33. Fibre Analysis (Textiles and Garment Products) (Level 4)

Major Competency Standards	Carry out suitable fibre analysis on textile and garment products independently, record accurate test data and determine the fibre types and contents of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105858L4	Perform fibre analysis

34. Garment Trim Tests (Textiles and Garment Products) (Level 4)

Major Competency Standards	Carry out suitable physical strength and performance tests on garment trims independently, record accurate test data and determine the physical strength and performance of the garment trims in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105863L4	Perform garment trim tests

35. Feather and Down Analysis (Level 4)

Major Competency Standards	Carry out suitable speciation and properties tests on feather and down independently, record accurate test data and determine the fabric properties of feather and down in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105862L4	Perform feather and down analysis

36. Performance Tests (Footwear) (Level 4)		
Major Competency Standards	Carry out suitable physical strength and performance tests on footwear products independently, record accurate test data and determine the performance of footwear products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105864L4	Perform footwear tests

**Laboratory / On-site Testing -
Testing Operations: Electrical and Electronic Products Testing**

37. Electrical and Electronic Safety Testing (Electric Shock and Energy Hazard tests) (Level 4)		
Major Competency Standards	Carry out electric shock and energy hazard tests on electrical products and conclude test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105820L4	Perform electric shock and energy hazard tests

38. Electrical and Electronic Safety Testing (Electrical Insulation tests) (Level 4)		
Major Competency Standards	Carry out electrical safety tests on electrical and electronic products independently and evaluate their electrical safety in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105821L4	Evaluate electrical insulation properties by electrical measurements
	105822L4	Evaluate electrical insulation properties by physical measurements

39. Electrical and Electronic Safety Testing (Electrical Products - Construction Evaluation) (Level 4)

Major Competency Standards	Carry out the evaluation of the marking and construction requirements of electrical and electronic products independently by visual inspection and conclude inspection results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105848L4	Evaluate the construction of products by visual inspection (electrical products)

40. Electrical and Electronic Safety Testing (Thermal Hazard and Flammability Tests) (Level 4)

Major Competency Standards	Carry out thermal hazard and flammability tests on electrical and electronic products independently and evaluate the thermal hazards and flammability of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105825L4	Perform thermal hazard related tests
	105826L4	Perform flammability tests (electrical and electronic products)

41. Electrical and Electronic Safety Testing (Stability and Mechanical tests) (Level 4)		
Major Competency Standards	Carry out stability and mechanical tests on electrical products and conclude test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105847L4	Perform stability and mechanical tests

42. Physical and Mechanical Testing (Electrical Products – Acoustic Measurement) (Level 4)		
Major Competency Standards	Carry out acoustic measurements on electrical and electronic products independently by applying suitable testing equipment and conclude test results in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data
	105849L4	Perform acoustic measurements (electrical products)

43. Electrical and Electronic Testing (Energy Efficiency) (Level 4)		
Major Competency Standards	Carry out energy and power consumption measurements on electrical and electronic products independently, record accurate measurement data and evaluate the energy efficiency of the products in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105873L3	Record and present data
	105823L4	Evaluate energy efficiency of electrical and electronic products
	105872L4	Process data
	105871L4	Apply statistical calculations to measurement data

Laboratory / On-site Testing - Testing Quality Management

44. Testing Quality Assurance (Level 4)		
Major Competency Standards	Undertake quality assurance activities and validate test results in compliance with the formulated quality control protocol.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105878L4	Implement laboratory quality control procedures
	105879L4	Control reference materials and working standards
	105880L4	Verify critical consumables
	105904L4	Implement corrective actions for testing services
	105905L4	Implement preventive actions for testing services

45. Measurement Traceability (Chemical Testing) (Level 4)		
Major Competency Standards	Undertake measurement traceability activities and validate chemical test results which comply with the formulated quality control protocol.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105890L4	Verify and maintain reference materials
	105892L4	Handle and perform equipment calibration

46. Measurement Traceability (Microbiological Testing) (Level 4)		
Major Competency Standards	Undertake measurement traceability activities and validate microbiological test results which comply with the formulated quality control protocol.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105891L4	Verify and maintain reference and working cultures
	105892L4	Handle and perform equipment calibration

47. Measurement Traceability (Physical Testing) (Level 4)		
Major Competency Standards	Undertake measurement traceability activities and validate physical test results which comply with the formulated quality control protocol.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105889L4	Calibrate and maintain reference standards
	105892L4	Handle and perform equipment calibration

Inspection – Inspection Operation

48. Inspection of Consumer Products (Level 4)		
Major Competency Standards	Prepare and perform inspection activities on consumer products in accordance with the standard operation procedures of the inspection body.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105914L3	Prepare work documents for conducting inspection
	105919L3	Record inspection observations and findings
	105911L4	Identify equipment and resources requirement for conducting inspection
	105912L4	Identify items and samples for inspection
	105913L4	Define defect classification and acceptance criteria
	105916L4	Perform on-site inspection of production processes / delivery of services
	105917L4	Inspect items and samples
	105918L4	Perform compliance inspection on materials

49. Inspection of Waterworks Products (Level 4)		
Major Competency Standards	Prepare and perform inspection activities on waterworks products in accordance with the standard operation procedures of the inspection body.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105914L3	Prepare work documents for conducting inspection
	105919L3	Record inspection observations and findings
	105911L4	Identify equipment and resources requirement for conducting inspection
	105912L4	Identify items and samples for inspection
	105913L4	Define defect classification and acceptance criteria
	105916L4	Perform on-site inspection of production processes / delivery of services
	105917L4	Inspect items and samples
	105918L4	Perform compliance inspection on materials

50. Quality Assurance of Inspection Operation (Level 4)		
Major Competency Standards	Perform quality assurance of inspection results and quality system maintenance in compliance with the formulated quality control protocol.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105921L4	Implement inspection quality control procedures
	105930L4	Implement corrective actions and preventive actions for inspection services

Operations Management – Occupation Safety and Health

51. Occupational Safety and Health (Level 4)		
Major Competency Standards	Provide OSH support in operation management in the workplace of the TIC industry.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105964L4	Monitor environmentally sustainable work practices
	105969L4	Implement occupational safety and health supervision
	105970L4	Monitor occupational safety and health system
	105972L4	Identify hazards associated with testing / inspection / certification activities

Laboratory / On-site Testing
Testing Operations: Construction Materials Testing

52. Physical and Mechanical Testing (Steel) (Level 4)		
Major Competency Standards	Carry out physical and mechanical tests on steel materials, record and analyse test data in testing laboratories.	
Years of Work Experience and Related Job Experience	SIX years' relevant experience in TIC industry (including THREE years' of experience in related field)	
Units of Competency	105845L3	Perform basic physical and
	105873L3	Record and present data
	105973L3	Maintain laboratory / field workplace
	105836L4	Perform physical and mechanical tests
	105872L4	Process data
	105961L4	Implement ethical practices