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# CAREER GUIDE

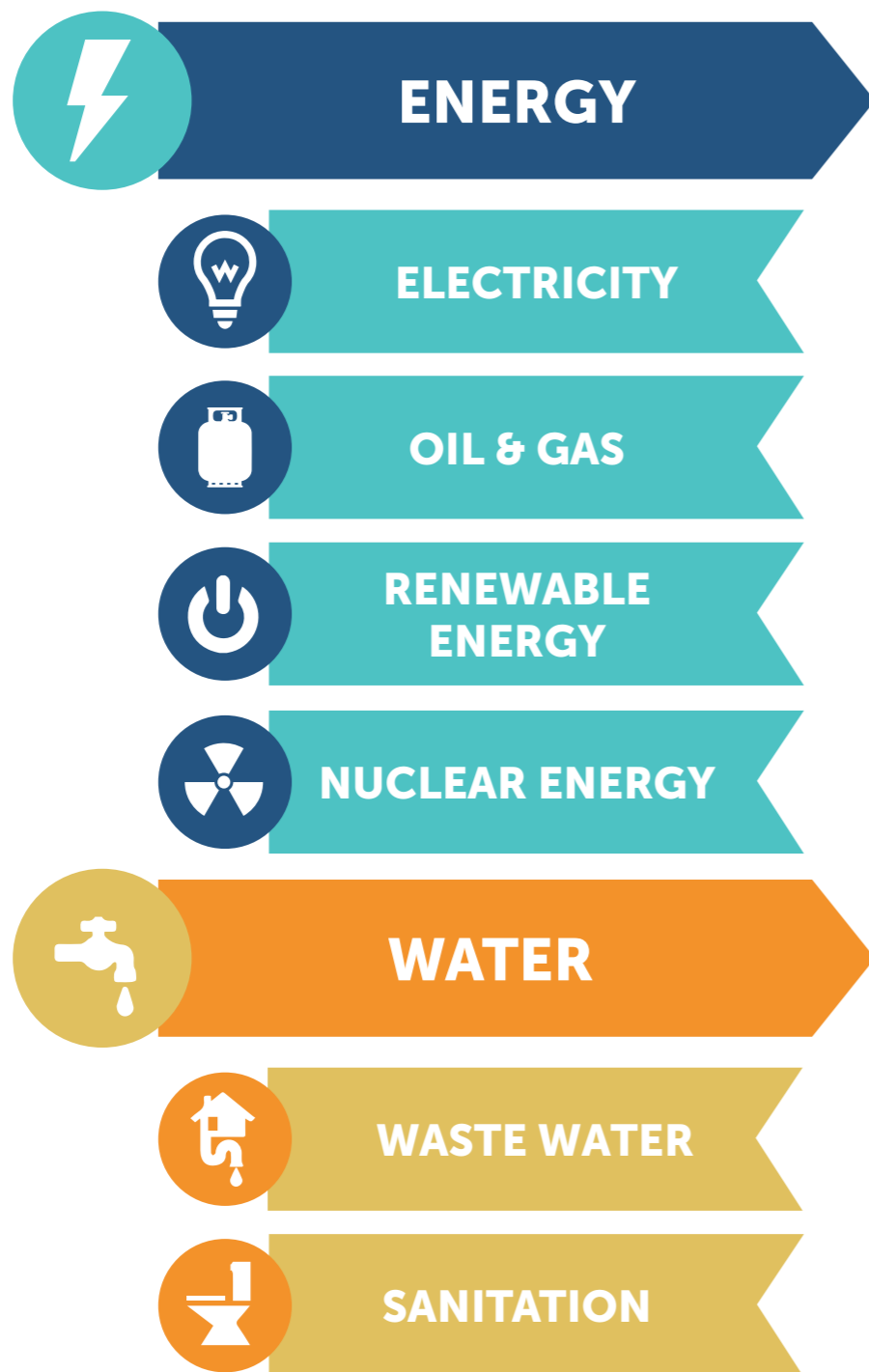




### About the EWSETA

The Energy and Water Sector Education and Training Authority (EWSETA) is one of 21 SETAs established in terms of Section 9 of the Skills Development Act, 97 of 1998, as amended and reports to the Honourable Minister of the Department of Higher Education and Training. Our mandate is to anticipate, build and manage the skills development and training needs of the energy and water services sector through strategic skills planning within the context of the National Skills Development Strategy (NSDS III).

The EWSETA covers the Energy and Water sector in South Africa and includes the following sub-sectors:



### Planning your Career in the Energy and Water Sector

The EWSETA offers a number of skills development and training programmes that can help you to achieve your dream career in the energy and water sector. This brochure will explore the different careers available in the energy and water sector and what qualifications you will need to get there.

If you have any questions once you've read this document, please feel free to contact the EWSETA's head office or visit the EWSETA website ([www.ewseta.org.za](http://www.ewseta.org.za)) for more information.

### What is the NQF?

The National Qualifications Framework (NQF) is a set of principles and guidelines designed to create a single integrated national framework for learning achievements and to contribute to your full personal development!

The aim of the NQF is to make lifelong learning possible by having a single system that facilitates access, movement and progression within the education system so you can contribute to South Africa's economy. Understanding the levels of the NQF will help you to further your education and advance from one level to the next.

Levels of the NQF			
Sub-Framework:	NQF Level:	Qualification Types:	Institutions:
Higher Education and Training	10	Doctoral Degree	Universities, Universities of Technology and Private Providers
	9	Master's Degree	Universities, Universities of Technology and Private Providers
	8	Honours Degree Master Post-Graduate Diploma	Universities, Universities of Technology and Private Providers
	7	Bachelor's Degree Advanced Diploma Advanced Certificate	Universities, Universities of Technology and Private Providers
	6	Diploma Advanced Certificate	Universities of Technology
	5	Higher Certificate Advanced National Certificate (Vocational)	TVET Colleges, Private Providers and Universities of Technology
Further Education and Training	4	National Senior Certificate (Grade 10 - 12)	TVET Colleges, Private Providers and Schools
	3	Senior Certificate (Colleges)	
	2	National Certificate (Vocational) Level 2 - 4	
General Education and Training	1	General Certificate (Grade 9 / ABET Level 4 National Certificates)	Schools and ABET Providers





### What is an Artisan?

An Artisan is someone who has undergone training in an apprenticeship programme and who has passed a trade test. Artisans are associated particularly with engineering fields such as electrical, welding, boiler making and fitting and turning.

### What is an Apprenticeship?

An apprenticeship is a technical training system that includes theoretical and practical training and workplace experience and is offered in most trades such as a millwright/fitter. It requires successful completion of a Trade Test after which the learner is then recognised as an Artisan. An Apprenticeship is job-orientated in that they relate to a specific trade. This means that you will learn a trade to fill a specific job post. An Apprenticeship is open to persons 16 years and older and requires good maths and science skills.

### What is a Learnership?

A Learnership provides practical, as well as theoretical experience for successful candidates. These programmes are based on scarce skills in South Africa. When completing a Learnership, some candidates may be offered a permanent position, where others will be skilled enough to enter the workforce in other sectors of the country or to start their own businesses.

### What is a University and a University of Technology?

Universities are institutions of higher learning and offer qualifications such as certificates, diplomas, and degrees. The education offered by universities is mainly theoretical and is focused on research. Universities of Technology are oriented towards professional qualifications, leading students directly into a career.

Undergraduate studies can lead to a higher certificate, diploma or degree. If you want to specialise further, you can study for post graduate or advanced diplomas, Honours, Masters or Doctoral degrees. Universities equip graduates for anything from science, engineering and medicine to law, business, teaching and acting.

Types of Courses offered at Universities and Universities of Technology:				
Type of Institution:	Entry Level Qualification:	Qualification:	Duration:	Progression:
University of Technology	<b>National Diploma</b>	A qualification which includes theoretical and practical learning	3 years	BTech MTech DTech
University	<b>Degree</b>	A qualification which includes mainly theoretical learning and research	3 – 4 years	Bachelor's Degree Honours Degree Master's Degree Doctorate



### What is a TVET College?

Technical and Vocational Education and Training (TVET) colleges offer National Certificates (Vocational) or NC(V) and Nated (N) qualifications. The programmes are aimed at developing vocational or occupational skills that are needed to do a specific job.

The NC(V) is offered in a variety of vocational fields at NQF levels 2, 3, and 4. It provides both theory and practical experience in a chosen field. NC(V) level 4 is on the same level as the National Senior Certificate that you can get for successfully completing Matric but it is more closely linked to the workplace.

Some fields that are covered by an NC(V) includes finance, economics and accounting, engineering and related design, civil engineering and building construction, office administration, primary agriculture, and more.

Types of Courses offered at TVET Colleges:				
Course Type:	Description:	Qualification:	Duration:	Admission Requirements:
National Certificate (Vocational) NC(V)	NC(V) programmes integrate theory and practical training.  These provide students with a broad range of knowledge and practical skills within specific industries.	Full Certificate at NQF Level 2, 3 and 4  Certificate is equivalent to the National Senior Certificate (Grade 12)	3 years	Grade 9 plus college requirements per programme
Nated (N)	Nated programmes consist of 18 months of theoretical studies and 18 months of relevant practical training/ workplace experience.  Engineering studies range from N1 to N6. Business studies range from N4 to N6.	N6 Diploma	1 year for N1 – N3 Engineering Studies  1 year for N4 – N6 Engineering Studies  3 years for N4 – N6 Business Studies	Grade 9 for N1 admission  Grade 12 for N4 admission
National Higher Certificate	National Higher Certificate programmes are offered at the TVET colleges in partnership with higher education institutions.	Unique to each programme	Unique to each programme	Grade 12 plus requirements from the higher education institution and the TVET college



## What is an Artisan?

An Artisan is someone who has successfully completed an apprenticeship programme and has passed a trade test within the energy and water sector. Artisans are associated particularly with engineering fields such as electrical engineering, welding, boiler making and fitting and turning.

### What is an Apprenticeship?

An apprenticeship:

- ✓ Is a technical training system that includes theoretical and practical training and workplace experience;
- ✓ Is offered in most trades such as a millwright/fitter;
- ✓ Requires successful completion of a Trade Test – the learner is then recognised as an Artisan;
- ✓ Is job-orientated in that they relate to a specific trade. This means that you will learn a trade to fill a specific job post;
- ✓ Is open to persons 16 years and older; and
- ✓ Requires good maths and science skills.

### Becoming an Artisan through an Apprenticeship

Through an employer advertisement, you can apply and become an employee (provided you meet the minimum criteria of having a Grade 9 with Maths and Science). Through a contract entered into with the EWSETA, the employer can enrol you on an apprenticeship programme, combining on the job training and modular based training at a TVET institution which will culminate in a trade test.



SO, YOU WANT TO BE AN ARTISAN?

## Why should I become an Artisan?



### ARTISANS ARE IN HIGH DEMAND

As someone possessing a scarce skill, you will be in demand by companies across South Africa

Your remuneration and annual increases are contained in the Manpower Training Act and are legislated and non-negotiable.

### TRADES ARE WELL REMUNERATED, WITH ANNUAL INCREASES



### WIDE CHOICE OF INDUSTRIES

You can move easily from one industry to the next. For example, you can move from the energy sector to the fuel sector, by completing a short course to fill industry-related gaps in your knowledge.

As an Artisan, you have a passport to career progress in that you can study further to become a technician or an engineer.

### STEPPING STONE TOWARDS YOUR DREAM CAREER



### START YOUR OWN BUSINESS

You can decide to become self-employed. For example, as a Qualified Electrician you can undergo a few short courses, apply for a wireman's/inspectors licence and become your own boss.

Your qualification is benchmarked against similar qualifications internationally. With a certificate issued in South Africa, you can work in various countries around the world, including Australia and Canada.

### INTERNATIONAL JOB PROSPECTS



SO, YOU WANT TO BE AN ARTISAN?



## What are the steps to becoming a qualified Artisan?

The Department of Higher Education and Training has founded the National Artisan Moderation Body (NAMB), which has developed seven steps you can follow to become a qualified artisan:



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## How to become an Artisan?

There are four main learning paths you can take to become an Artisan:



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## What is a Trade Test?

During an Apprenticeship, modular and phase tests are conducted to assess your grasp of skills being taught and prepare you for the final Trade Test. A Trade Test is a final external summative assessment included in the occupational qualification for a listed artisan trade. Trade Tests are conducted by an assessor registered with the National Artisan Moderation Body (NAMB) at a Trade Test Centre accredited by the Quality Council for Trades and Occupations (QCTO). Only when you have passed a Trade Test will you be recognised as a qualified artisan.



What is needed to enter a training programme to become an Artisan?

You will need:




**PASS GRADE 9 WITH MATHS AND SCIENCE**

**CERTIFICATE OF PHYSICAL FITNESS**



**EXPERIENCE IN AN INDUSTRY / TRADE OR N-COURSE FROM A TVET**



What are the registered Trades in the energy and water sector?

Trade Name:	Job Description:	Benefits:	Qualities and skills needed:	Who will employ me:
<b>Fitter / welder</b> 	Lays out, positions and secures parts and assembles according to specifications, welds components using electricity or gas and installs or repairs equipment such as lead pipes, valves, floors and tank linings.	<ul style="list-style-type: none"> <li>• Secure, good employment;</li> <li>• Competitive salary; and</li> <li>• Challenging but rewarding work.</li> </ul>	<ul style="list-style-type: none"> <li>• Physical strength and stamina;</li> <li>• Good co-ordination and manual dexterity;</li> <li>• Mechanical aptitude; and</li> <li>• Ability to work in close quarters.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractors involved in manufacturing, construction or maintenance and repair;</li> <li>• Large engineering works and industrial plants; factories and iron and steel plants;</li> <li>• Shipyards and government departments;</li> <li>• Transnet; and</li> <li>• Mines and garages.</li> </ul>

**SO, YOU WANT TO BE AN ARTISAN?**



**SO, YOU WANT TO BE AN ARTISAN?**

Trade Name:	Job Description:	Benefits:	Qualities and skills needed:	Who will employ me:
<b>Fitter and Turner</b> 	Manufactures, constructs, assembles and fits components for machinery, vehicles and installations. Also maintains and repairs such equipment. From the blueprint for a piece of equipment, the fitter and turner crafts the rough metal into its final form, fits the parts and inspect and test the final assembly of the machine.	<ul style="list-style-type: none"> <li>• Opportunity to specialise;</li> <li>• Secure, good employment;</li> <li>• Competitive salary;</li> <li>• Challenging, but rewarding; and</li> <li>• Job satisfaction of seeing the results of your work.</li> </ul>	<ul style="list-style-type: none"> <li>• Be at least 16 years old;</li> <li>• Enjoy working with your hands;</li> <li>• Be practical;</li> <li>• Meticulous accuracy;</li> <li>• Mathematical aptitude;</li> <li>• Ability to read 3D drawings;</li> <li>• Ability to concentrate; and</li> <li>• Be responsible.</li> </ul>	<ul style="list-style-type: none"> <li>• Fitting and turning contractors involved in manufacturing, construction or maintenance and repair;</li> <li>• Large engineering works and industrial plants;</li> <li>• Power stations, factories and iron and steel plants;</li> <li>• Shipyards and government departments;</li> <li>• Transnet; and</li> <li>• Mines and garages.</li> </ul>
<b>Electrician</b> 	Electricians are involved in the generation, transmission, distribution and usage of electricity. They install, repair and maintain electrical equipment and detect electrical faults. You may supervise the erection of pylons, the connection of high-tension cabling on pylons, install transformers and switchboards at substations. Electricians at power stations install and maintain power generators and/ or perform inspections on motors, switchgear and transformers.	<ul style="list-style-type: none"> <li>• Variety of work tasks and locations; and</li> <li>• Job satisfaction through solving problems and working with your hands.</li> </ul>	<ul style="list-style-type: none"> <li>• Be at least 16 years old;</li> <li>• Enjoy working with your hands;</li> <li>• Be responsible;</li> <li>• Ability to work under pressure;</li> <li>• Communicate well with colleagues ;</li> <li>• Have good health, with good eyesight and able to see colours.</li> </ul>	<ul style="list-style-type: none"> <li>• Transport companies;</li> <li>• Government departments, parastatals, municipalities,;</li> <li>• Factories, mines and industries;</li> <li>• Private electrical businesses; and</li> <li>• Self-employment is also an option.</li> </ul>



## SO, YOU WANT TO BE AN ARTISAN?

Trade Name:	Job Description:	Benefits:	Qualities and skills needed:	Who will employ me:
<b>Instrument Mechanician</b> 	Installs, repairs, maintains and adjusts indicating, recording, telemetering, and controlling instruments and test equipment; disassembles malfunctioning instruments or test equipment, such as bar graphs, electrical ovens, multimeters, environmental cabinets, and weatherometers, and examines and tests mechanisms and circuitry for defects; replaces or repairs defective parts using hand tools; reassembles instrument or test equipment, and tests assembly for conformance to specifications and inspects instruments and test equipment periodically and adjusts calibration to ensure functioning within specified standards.	<ul style="list-style-type: none"> <li>Rewarding if you enjoy identifying and solving problems; and</li> <li>Good job prospects.</li> </ul>	<ul style="list-style-type: none"> <li>Be detail-oriented;</li> <li>Good analytical skills;</li> <li>Knowledge of mathematics; and</li> <li>Ability to work to precise specifications.</li> </ul>	<ul style="list-style-type: none"> <li>Companies in the manufacturing sector, in industries such as food processing, textile mills, chemicals, fabricated metal products, motor vehicles, and primary metals.; and</li> <li>Government agencies, public utilities, mining companies and other establishments in which industrial machinery is used.</li> </ul>



## SO, YOU WANT TO BE AN ARTISAN?

Trade Name:	Job Description:	Benefits:	Qualities and skills needed:	Who will employ me:
<b>Plumber</b> 	Installs, maintains, tests and repairs above-ground soil waste and vent systems and sanitary ware appliances; installs, maintains, tests and repairs below-ground drainage systems and performs basic building work; installs, maintains, tests and repairs cold and hot water systems as well as rain water systems.	<ul style="list-style-type: none"> <li>Fulfilling career that allows you to combine knowledge and innovation with the ability to create and build with your hands.</li> <li>Great remuneration benefits and career potential.</li> </ul>	<ul style="list-style-type: none"> <li>Be mechanically inclined.</li> <li>Be in good physical shape.</li> <li>Punctuality, good co-ordination skills and problem-solving skills.</li> <li>Good communication skills and dedication.</li> </ul>	<ul style="list-style-type: none"> <li>Homeowners, rental/leasing agents and body corporates.</li> <li>Companies in most sectors.</li> <li>Construction companies.</li> <li>Self-employment.</li> </ul>



### What is a Learnership?

A Learnership provides practical, as well as theoretical experience for successful candidates. These programmes are based on scarce skills in South Africa. When completing a Learnership, some candidates may be offered a permanent position, where others will be skilled enough to enter the workforce in other sectors of the country or to start their own businesses.

#### Who can apply for a Learnership?

Anyone can apply for a Learnership, for example:

- ✓ Young people leaving school and college;
- ✓ Unemployed or employed people; and
- ✓ People of all ages.

#### Why should I apply for a Learnership?



##### GET A JOB!

Although it is not guaranteed or compulsory that the employer who provided you with the Learnership offers you a job, with a qualification and work experience, you will be in a much stronger position to get a job.

With the tools and experience you will learn through the Learnership, you will be able to start your own business if this is a path you want to pursue.

##### START YOUR OWN BUSINESS!



##### ACHIEVE YOUR DREAM CAREER!

After finishing your Learnership, you may decide that you want to study further to achieve your desired career – for example, become an Electrical Engineer.

The employer must pay a learner allowance called a stipend to each candidate selected for a Learnership Programme. The stipend IS NOT a salary but an allowance which is to be used by the learner to enable him/her to attend training. The amount depends on the type of Learnership and on the employer. By law, there are minimum levels of allowances and conditions of employment that apply, but an employer can decide to pay more. The allowances and conditions of employment are agreed with each learner before the programme begins.

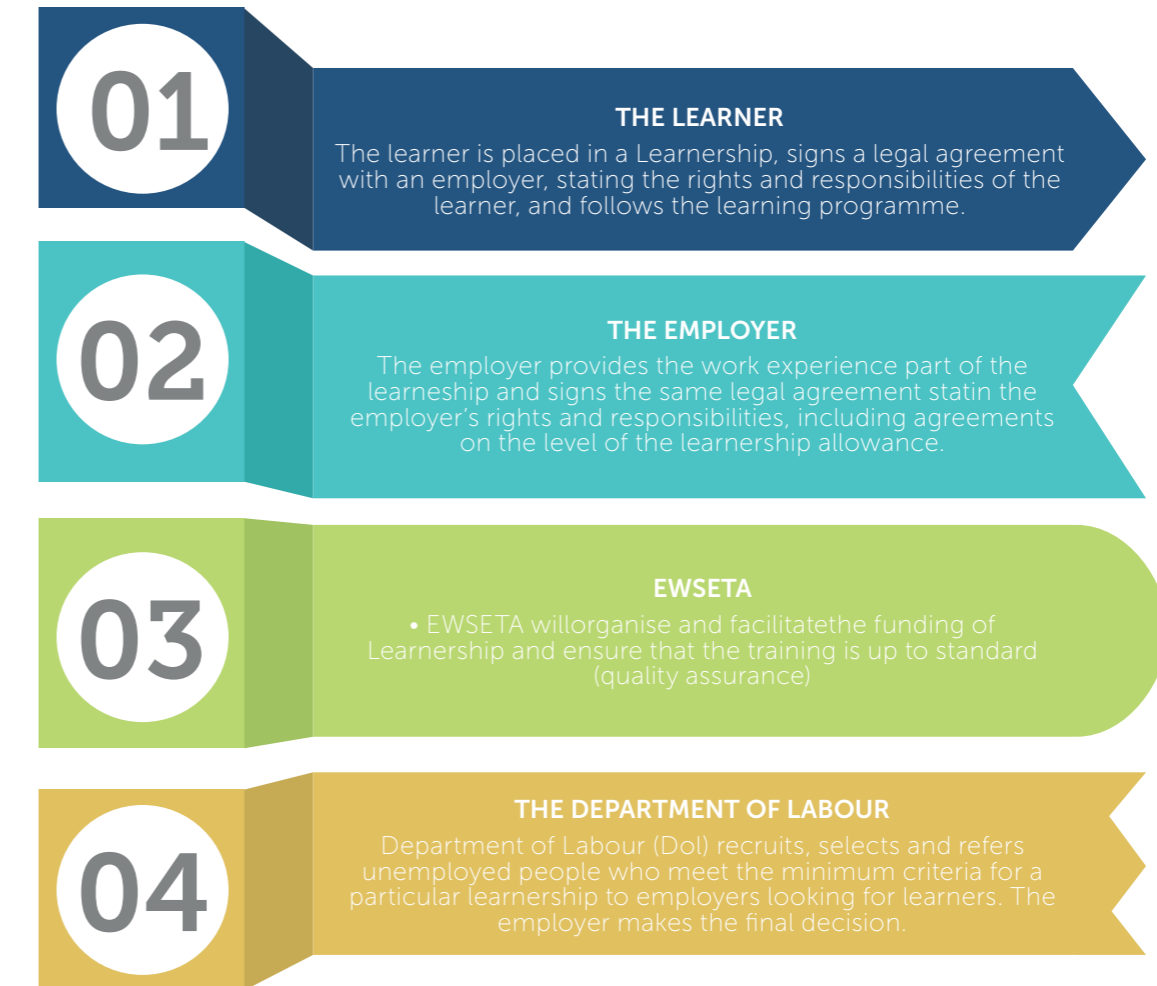
##### IT'S FREE!



### How long does a Learnership take?

The length of Learnerships differ, but will **not be less than one year**. There is an opportunity for learners to progress from one Learnership level to the next. For example, from an N1 – N3, becoming more skilled in a particular career field as one progresses. However, each level would take a minimum of one year.

### Who is involved in a Learnership and what are their roles?







### What will I get at the end of a Learnership?

After successfully completing a learnership you will be awarded with a **National Certificate** as proof of your skills and knowledge. This certificate is recognised both in South Africa and internationally.

### How do I apply for a Learnership if I am unemployed?

- ✓ Register as a work seeker at your nearest Department of Labour centre.
- ✓ The labour centre will then contact you if you meet the minimum criteria for the learnership of a specific employer. If you meet the criteria, you may be called in for a briefing session and possible assessment prior to final selection.
- ✓ Look out for Learnership advertisements in newspapers or online and apply if you meet the requirements.
- ✓ Engage your Ward Councillors as very often they are aware of Learnership opportunities

### What Learnerships are available through the EWSETA in the energy and water sectors?

Below you will find a full list of all learnerships available in the energy and water sectors:

#### Registered Energy Learnerships:

NQF Level:	Title/Qualification:	SAQA ID:	Learnership:
Level 2	FET: Measurement Control and Instrumentation	74530	1. National Certificate in Measurement Control and Instrumentation
Level 3	FET: Measurement Control and Instrumentation	74532	1. National Certificate in measurement Control and Instrumentation
Level 4	FET: Measurement Control and Instrumentation	74531	1. National Certificate in Measurement Control and Instrumentation
Level 5	FET: Measurement Control and Instrumentation	49746	In process of being developed
Level 3	FET: Power Plant Auxiliary System Operation (Nuclear, Fossil and Hydro)	61549	1. National Certificate in Nuclear Power Plant Auxiliary System Operation
			2. National Certificate in Fossil Power Plant Auxiliary System Operation
			3. National Certificate in Hydro Power Plant Auxiliary System Operation
			4. National Certificate in Fossil Power Plant Auxiliary System Operation (Non-Eskom Plants)



NQF Level:	Title/Qualification:	SAQA ID:	Learnership:
Level 4	19. FET: Power Plant Operation (Nuclear, Fossil and Hydro)	61569	1. National Certificate in Nuclear Power Plant Operation
			2. National Certificate in Fossil Power Plant Operation
			3. National Certificate in Hydro Power Plant Operation
Level 5	20. FET: Power Plant Process Control (Nuclear, Fossil and Hydro)	61570	1. National Certificate in Nuclear Power Plant Process Control Operations
			2. National Certificate in Fossil Power Plant Process Control Operations (Eskom Utilised Plants)
			3. National Certificate in Fossil Power Plant Process Control Operations (Non-Eskom Utilised Plants)
			4. National Certificate in Hydro Power Plant Process Control Operations
Level 1	GETC: General Education and Training in Basic Technical Practice (Energy)	49753	GETC in Basic Technical Practice (Energy)
Level 2	FET: Electrical Engineering	73313	1. National Certificate in Electrical Engineering (Construction)
			2. National Certificate in Electrical Engineering (Generation GX)
			3. National Certificate in Electrical Engineering (Distribution DX)
			4. National Certificate in Electrical Engineering (Transmission TX)

Registered Water Learnerships:

NQF Level:	Title/Qualification:	SAQA ID:	Learnership:
Level 2	FET: Water and Waste Water Reticulation	60169	1. National Certificate in Water Reticulation
			2. National Certificate in Waste Water Reticulation
Level 3	FET: Water and Waste Water Reticulation	60155	1. National Certificate in Water Reticulation
			2. National Certificate in Waste Water Reticulation
Level 4	FET: Water and Waste Water Reticulation	60189	1. National Certificate in Water Reticulation
			2. National Certificate in Waste Water Reticulation
Level 2	FET: Water and Waste Water Treatment Operation	58951	1. National Certificate in Water Treatment Operation
			2. National Certificate in Wastewater Treatment Operation
Level 3	FET: Water and Waste Water Treatment Operation	60190	1. National Certificate in Water Treatment Operation
			2. National Certificate in Wastewater Treatment Operation
Level 4	FET: Water and Waste Water Treatment Operation	61709	1. National Certificate in Water Treatment Process Control Supervision
			2. National Certificate in Wastewater Treatment Process Control Supervision
Level 2	FET: Community Water, Health, Hygiene and Sanitation Promotion	61689	1. National Certificate in Community Water, Health, Hygiene and Sanitation Promotion (General)
			2. National Certificate in Community Water, Health, Hygiene and Sanitation Promotion (Sanitation Builder)



**FAST TRACK YOUR CAREER  
THROUGH A LEARNERSHIP**

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THROUGH A LEARNERSHIP**

NQF Level:	Title/Qualification:	SAQA ID:	Learnership:
Level 3	FET: Electrical Engineering	72051	1. National Certificate in Electrical Engineering (Construction)
			2. National Certificate in Electrical Engineering (Generation GX)
			3. National Certificate in Electrical Engineering (Distribution DX)
			4. National Certificate in Electrical Engineering (Transmission TX)
			5. National Certificate in Electrical Construction and Entrepreneurial Learnership
			6. National Certificate in Electrical Repairs Learnership
Level 4	FET: Electrical Engineering	72052	1. National Certificate in Electrical Engineering (Construction)
			2. National Certificate in Electrical Engineering (Generation GX)
			3. National Certificate in Electrical Engineering (Distribution DX)
			4. National Certificate in Electrical Engineering (Transmission TX)
Level 4	FET: Electrical Network Control	48978	NC: in Electrical Network Control
Level 4	FET: Electrical Network Control on Gas Turbine Plants	48978	NC: in Electrical Network Control on Gas Turbine Plants
Level 5	FET: Electrical Network Power Dispatch Control	57693	National Diploma in Electrical Network Power Dispatch Control
Level 3	NC: Radiation Monitoring	49596	NC: Radiation Monitoring
Level 4	FETC: Radiation Protection	50329	FETC: Radiation Protection
Level 5	NC: Radiation Protection	57631	NC: Radiation Protection



## FAST TRACK YOUR CAREER THROUGH A LEARNERSHIP

NQF Level:	Title/Qualification:	SAQA ID:	Learnership:
Level 3	FET: Community Water, Health, Hygiene and Sanitation Monitoring	64589	1. National Certificate in Community Water, Health, Hygiene and Sanitation Monitoring (Sanitation Builder)
			2. National Certificate in Community Water, Health, Hygiene and Sanitation Monitoring (General)
			3. National Certificate in Community Water, Health, Hygiene and Sanitation Monitoring (SMME)
Level 4	FET: Community Water, Health, Hygiene and Sanitation Facilitation	61669	1. National Certificate in Community Water, Health, Hygiene and Sanitation Facilitation (Operation and Maintenance)
			2. National Certificate in Community Water, Health, Hygiene and Sanitation Facilitation (Educator)
			3. National Certificate in Community Water, Health, Hygiene and Sanitation Facilitation
			4. National Certificate in Community Water, Health, Hygiene and Facilitation (General)
Level 1	GETC: General Education & Training Certificate in Water Services	48495	GETC in Water Services
Level 2	NC: Industrial Water Treatment Support Systems Operations	77163	National Certificate in Industrial Water Treatment Support System Operations

Scarce skills are those occupations in which there is a scarcity of qualified and experienced people, either because such skilled people are not available (absolute scarcity) or they are available but do not meet the employment criteria (relative scarcity).

If you meet the criteria for an occupation that is classified as a scarce skill, you stand a very good chance of securing a job.

Below is a list of the Scarce Skills in the Energy and Water Sector:

Occupation:	OFO Code:
Electrical Engineer	215101
Engineering Manager	132104
Programme or Project Manager	121905
Electrician	671101
Health and Safety Manager	121206
Quantity Surveyor	214904
Construction Project Manager	132301
Environmental Manager	134901
Fitter	653303
Fitter and Turner	652302
Program or Project Administrator	441903
Water Process Controller	313201
Civil Engineer	214201
Stock Clerk / Officer	432101
Welder	651202
Boiler Maker	651302
Production / Operations Manager (Manufacturing)	132102
Energy Engineer	215103
Water Quality Analyst	213306
Application Development Manager	133104
Concentrated Solar Power (CSP) Plant Process Controller	313106
Instrument Mechanician	672105
Pipe Fitter	642607
Diesel Mechanic	653306
Environmental Engineer	214301
Environmental Engineering Technician	311906
Millwright	671202
Plumber	642601
Power Generation Operations Manager	132105



## SCARCE SKILLS IN THE ENERGY AND WATER SECTOR



Below you will find a full list of TVET colleges in South Africa that offers a number of learning programmes, including learnerships, apprenticeships, skills programmes, etc. Get in touch with a TVET close to you and start your journey to a career in the energy and water sector!

**Eastern Cape:**

College Name:	Physical Address:	Contact Information:
Buffalo City TVET College	Cnr. Lukin Road and King Street, Selborne, East London, 5201	Tel: 043 722 5453 Fax: 043 743 4254 Web: <a href="http://www.bccollege.co.za">http://www.bccollege.co.za</a>
East Cape Midlands TVET College	Cnr. Cuyler and Durban Street, Uitenhage, 6229	Tel: 041 995 2000 Fax: 041 995 2008 Web: <a href="http://www.emcol.co.za">http://www.emcol.co.za</a>
Ikhala TVET College	Cnr. Robinson and Zeiler Street, Queenstown, 5320	Tel: 047 873 8843 Fax: 047 873 8844 Email: <a href="mailto:queenstown@ikhalacollege.org.za">queenstown@ikhalacollege.org.za</a>
Ingwe TVET College	Cancele Road, Mt Frere, Eastern Cape, 5090	Tel: 039 255 0346 Fax: 039 255 0532 Email: <a href="mailto:sipamla@ingwecollege.org.za">sipamla@ingwecollege.org.za</a>
King Hintsa TVET College	Factory no. 1234, Acrytex Building, Crane Road, Butterworth, 4960	Tel: 047 401 6400 Fax: 047 491 3730 Email: <a href="mailto:teki@kinghintsafetcollege.org.za">teki@kinghintsafetcollege.org.za</a>
King Sabatha Dalindyebo TVET College	Engcobo Road, Cnr. Cicira, Eastern Cape	Tel: 047 536 0923 Fax: 047 531 3297 Email: <a href="mailto:jola@ksdfetcollege.org.za">jola@ksdfetcollege.org.za</a>
Lovedale TVET College	Amatola Row, King Williams Town, 5600	Tel: 043 642 1331 Fax: 043 642 1388 Email: <a href="mailto:snstofile@lovedale.org.za">snstofile@lovedale.org.za</a>
Port Elizabeth TVET College	139 Russell Road, Central, Port Elizabeth	Tel: 041 585 7771 Fax: 041 582 2281 Email: <a href="mailto:pec@rrc.ac.za">pec@rrc.ac.za</a>

**Free State:**

College Name:	Physical Address:	Contact Information:
Flavius Mareka TVET College	Cnr. Hertzog Road and Fraser Street, Sasolburg, 1947	Tel: 016 976 0815 Fax: 016 973 1618 Web: <a href="http://www.flaviusmareka.net">http://www.flaviusmareka.net</a>
Goldfields TVET College	14107 Ndaki Road, Thabong, 9463	Tel: 057 392 1310 Fax: 057 392 1082 Email: <a href="mailto:lmfourie@goldfields-college.edu.za">lmfourie@goldfields-college.edu.za</a>
Maluti TVET College	Mampoi Street, Phuthaditjhaba, Qwaqwa, 9866	Tel: 058 713 3048 Fax: 058 713 6492 Email: <a href="mailto:centraloffice@amalutifet.co.za">centraloffice@amalutifet.co.za</a>
Motheo TVET College	Cnr. St George and Aliwal, Bloemfontein, 9300	Tel: 051 406 9300 Fax: 051 406 9340 Email: <a href="mailto:maboaya@motheofet.co.za">maboaya@motheofet.co.za</a>

**Gauteng:**

College Name:	Physical Address:	Contact Information:
Central JHB TVET College	5 Ubla Street, Parktown, 2041	Tel: 011 481 1388 Fax: 011 642 7358 Web: <a href="http://www.cjc.co.za">http://www.cjc.co.za</a>
Ekurhuleni East TVET College	Sam Ngema Road, Kwathema, Springs, 1560	Tel: 011 736 4400 Fax: 011 736 1489 Web: <a href="http://www.eec.edu.za">http://www.eec.edu.za</a>
Ekurhuleni West TVET College	Driendek Street, Cnr. Sol Road, Germiston, 1400	Tel: 011 323 1600 Fax: 086 323 1601 Email: <a href="mailto:hellenn@ewc.edu.za">hellenn@ewc.edu.za</a>
Sedibeng TVET College	37 Voortrekker Street, Vereeniging, 1930	Tel: 016 422 6645 Fax: 016 422 6930 Email: <a href="mailto:abe@sedcol.co.za">abe@sedcol.co.za</a>
South West Gauteng TVET College	Koma, Cnr. Molele Road, Molapo Section, Soweto	Tel: 011 984 1260 Fax: 011 984 1262 Email: <a href="mailto:nkosidl@swgc.co.za">nkosidl@swgc.co.za</a>
Tshwane North TVET College	Cnr. Potgieter and Pretorius Street, Pretoria, 0001	Tel: 012 401 1950 Fax: 012 323 8683 Email: <a href="mailto:info@tnc4fet.co.za">info@tnc4fet.co.za</a>





College Name:	Physical Address:	Contact Information:
Tshwane South TVET College	Lyttleton Tekbase, College Street, Centurion, 0140	Tel: 012 660 8501 Fax: 012 660 8547 Email: <a href="mailto:cindy.snyman@tsc.edu.za">cindy.snyman@tsc.edu.za</a>
Western College for TVET	Kiewiet Street, Helikon Park, Randfontein, 1760	Tel: 011 693 3608 Fax: 011 412 3047 Email: <a href="mailto:louis@westcol.co.za">louis@westcol.co.za</a>

**Kwazulu-Natal:**

College Name:	Physical Address:	Contact Information:
Coastal TVET College	No. 50051 Old Main Road, Kwamathutha, 4125	Tel: 031 905 7000 Fax: 031 905 3246 Web: <a href="http://www.coastalkzn.co.za">http://www.coastalkzn.co.za</a>
Elangeni TVET College	15 Portsmouth Road, Pinetown, 3610	Tel: 031 716 6700 Fax: 031 716 6777 Web: <a href="http://www.efet.co.za">http://www.efet.co.za</a>
Esayidi TVET College	22 Veronica Gamalakhe, Port Shepstone, 4249	Tel: 039 684 0110 Fax: 039 318 1514 Web: <a href="http://www.esayidifet.co.za">http://www.esayidifet.co.za</a>
Majuba TVET College	52 Voortrekker Street, Newcastle, 2940	Tel: 034 326 4888 Fax: 034 326 4855 Web: <a href="http://www.majuba.edu.za">http://www.majuba.edu.za</a>
Mnambithi TVET College	77 Murchison Street, Ladysmith, 3370	Tel: 036 638 3800 Fax: 036 631 4146 Email: <a href="mailto:chettyd.mnacao@feta.gov.za">chettyd.mnacao@feta.gov.za</a>
Mthasana TVET College	266 South Street, Vryheid, 3100	Tel: 034 980 1010 Fax: 034 980 1012 Email: <a href="mailto:mthashana@telkomsa.net">mthashana@telkomsa.net</a>
Thekwini TVET College	262 Daintree Avenue, Asherville, 4091	Tel: 031 250 8400 Fax: 031 208 3653 Web: <a href="http://www.thekwinicollege.co.za">http://www.thekwinicollege.co.za</a>
Umfolozi TVET College	Via Richardia, Naboomnek, Richards Bay, 3900	Tel: 035 902 9503 Fax: 035 789 1811 Web: <a href="http://www.umfolozicollege.co.za">http://www.umfolozicollege.co.za</a>
Umgungundlovu TVET College	4 Prince Albert Street, Pietermaritzburg	Tel: 033 341 2100 Fax: 033 345 9893 Email: <a href="mailto:khuzwayo.s@ufetcollege.co.za">khuzwayo.s@ufetcollege.co.za</a>

**Limpopo:**

College Name:	Physical Address:	Contact Information:
Capricorn TVET College	Cnr. Dort and College Street, Polokwane, 0700	Tel: 015 297 8389 Fax: 015 297 5448 Email: <a href="mailto:kmadzhe@capricorncollege.co.za">kmadzhe@capricorncollege.co.za</a>
Lephalale TVET College	Cnr. Nelson Mandela and Ramatlhodi Street, Onverwacht, 0557	Tel: 014 763 1014 Fax: 014 763 2253 Web: <a href="http://www.lephalalecollege.co.za">http://www.lephalalecollege.co.za</a>
Letaba TVET College	No. 1 Claude Wheatley Street, Tzaneen, 0850	Tel: 015 307 5440 Fax: 015 307 4493 Web: <a href="http://www.letabafet.co.za">http://www.letabafet.co.za</a>
Mopani South East TVET College	Cnr. Combretium and Harlem, Phalaborwa, 1390	Tel: 015 781 5725 Fax: 015 781 5346 Email: <a href="mailto:administration@mopanifet.co.za">administration@mopanifet.co.za</a>
Sekhukhune TVET College	Stand No. 676, Motetema, 0473	Tel: 013 269 0278 Fax: 013 269 0450 Web: <a href="http://www.sekfetcol.org">http://www.sekfetcol.org</a>
Vhembe TVET College	203 Sibasa, Unit A, Sibasa, 0970	Tel: 015 516 4773 Fax: 015 516 4773 Web: <a href="http://www.vhembefet.co.za">http://www.vhembefet.co.za</a>
Waterberg TVET College	36 Hooge Street, Mokopane, 0600	Tel: 015 491 8581 Fax: 015 491 8579 Web: <a href="http://www.waterbergcollege.co.za">http://www.waterbergcollege.co.za</a>

**Mpumalanga:**

College Name:	Physical Address:	Contact Information:
Ehlanzeni TVET College	29 Bell Street, Nelspruit	Tel: 013 752 7105 Fax: 013 752 4902 Web: <a href="http://www.ehlanzenifet.co.za">http://www.ehlanzenifet.co.za</a>
Gert Sibande TVET College	18A Piet Retief Street, Standerton, 2430	Tel: 017 712 9040 Fax: 017 712 9058 Web: <a href="http://www.gscollge.co.za">http://www.gscollge.co.za</a>
Nkangala TVET College	Cnr. Haig and Northey Street, Witbank, 1035	Tel: 013 690 1460 Fax: 013 690 1450 Email: <a href="mailto:qwabe.p@lantic.net">qwabe.p@lantic.net</a>





Northern Cape:

College Name:	Physical Address:	Contact Information:
Northern Cape Rural TVET College	Steve Naude Street, Upington	Tel: 054 331 3836 Fax: 054 331 1183 Web: <a href="http://ncrtvet.com/">http://ncrtvet.com/</a>
Northern Cape Urban TVET College	Jan Smuts Avenue, Kimberly	Tel: 013 690 1430 Fax: 013 690 1450 Web: <a href="http://ncutvet.edu.za/">http://ncutvet.edu.za/</a>

North West:

College Name:	Physical Address:	Contact Information:
Orbit TVET College	Bosch Cnr. Fatima Bhayat Street, Rustenburg, 0300	Tel: 014 592 7014 Fax: 014 592 7013 Web: <a href="http://www.orbitcollege.co.za">http://www.orbitcollege.co.za</a>
Taletso TVET College	Kgora Building, Dr Albert Luthuli Drive, Next to SABC, Mmabatho, 2735	Tel: 018 384 2346 Fax: 018 381 7410 Email: <a href="mailto:sybilgelderbloem@telkomsa.net">sybilgelderbloem@telkomsa.net</a>
Vuselela TVET College	113 OR Tambo Street, Klerksdorp, 2570	Tel: 018 462 5821 Fax: 018 406 7810 Web: <a href="http://www.vuselelacollege.co.za">http://www.vuselelacollege.co.za</a>

Western Cape:

College Name:	Physical Address:	Contact Information:
Boland TVET College	85 Bird Street, Stellenbosch, 7600	Tel: 021 886 7111 Fax: 021 886 8182 Web: <a href="http://www.bolandcollege.com">http://www.bolandcollege.com</a>
College of Cape Town	334 Albert Road, Salt River, Cape Town, 7925	Tel: 021 404 6700 Fax: 021 404 6709 Web: <a href="http://www.cct.edu.za">http://www.cct.edu.za</a>
False Bay TVET College	Westlake Drive, Westlake, 7966	Tel: 021 701 1919 Fax: 021 701 2693 Web: <a href="http://www.falsebaycollege.co.za">http://www.falsebaycollege.co.za</a>
Northlink TVET College	Detijger Office Park, Unit 1, Corner Haneslow and McTier Street, Parow	Tel: 021 970 9064 Fax: 021 930 5729 Web: <a href="http://www.northlink.co.za">http://www.northlink.co.za</a>

College Name:	Physical Address:	Contact Information:
South Cape TVET College	Tommy Joubert Building (South), Cnr. Courtenay and Cradock Street, George, 6529	Tel: 044 884 0359 Fax: 044 884 0361 Web: <a href="http://www.sccollege.co.za">http://www.sccollege.co.za</a>
West Coast TVET College	Rainier, Cnr. Kerk Street, Clicks Building, 2nd Floor, Voortrekker Road, Malmesbury, 7300	Tel: 022 482 1143 Fax: 022 487 3983 Web: <a href="http://www.westcoastcollege.co.za">http://www.westcoastcollege.co.za</a>





Below you will find a list of universities and universities of technology in South Africa. Please contact one near you or visit their website to see what programmes they offer and what requirements are needed to apply for a qualification from these institutions.

University Name:	Campuses Situated in:	Contact Information:
Nelson Mandela Metropolitan University	Eastern Cape	Tel: 041 504 1111 Fax: 041 504 2574 Web: <a href="http://www.nmmu.ac.za">http://www.nmmu.ac.za</a> Email: <a href="mailto:info@nmmu.ac.za">info@nmmu.ac.za</a>
North West University	North West	Tel: 018 299 4897 Fax: 018 299 4910 Web: <a href="http://www.nwu.ac.za">http://www.nwu.ac.za</a> Email: <a href="mailto:jacoline.jansenvanvuuren@nwu.ac.za">jacoline.jansenvanvuuren@nwu.ac.za</a>
Rhodes University	Eastern Cape	Tel: 046 603 8111 Fax: 046 603 7350 Web: <a href="http://www.ru.ac.za">http://www.ru.ac.za</a> Email: <a href="mailto:registrar@ru.ac.za">registrar@ru.ac.za</a>
University of Cape Town	Western Cape	Tel: 021 650 2128 Fax: 021 650 5189 Web: <a href="http://www.uct.ac.za">http://www.uct.ac.za</a> Email: <a href="mailto:admissions@uct.ac.za">admissions@uct.ac.za</a>
University of Fort Hare	Eastern Cape	Tel: 043 704 7139 Web: <a href="http://ufh.ac.za">http://ufh.ac.za</a> Email: <a href="mailto:mgcilitshana@ufh.ac.za">mgcilitshana@ufh.ac.za</a>
University of Johannesburg	Gauteng	Tel: 011 559 4555 Web: <a href="http://www.uj.ac.za">http://www.uj.ac.za</a> Email: <a href="mailto:myfuture@uj.ac.za">myfuture@uj.ac.za</a>
University of Kwazulu-Natal	Kwazulu-Natal	Tel: 031 260 8596 Web: <a href="http://www.ukzn.ac.za">http://www.ukzn.ac.za</a> Email: <a href="mailto:enquiries@ukzn.ac.za">enquiries@ukzn.ac.za</a>
Sefako Makgatho University	Gauteng	Tel: 012 521 4111 Fax: 012 560 0086 Web: <a href="http://www.smu.ac.za">http://www.smu.ac.za</a>
University of Mpumalanga	Mpumalanga	Tel: 013 002 0001 Web: <a href="http://www.ump.ac.za">http://www.ump.ac.za</a> Email: <a href="mailto:info@ump.ac.za">info@ump.ac.za</a>
University of Limpopo	Limpopo	Tel: 015 268 3332 Fax: 015 267 0152 Web: <a href="http://www.ul.ac.za">http://www.ul.ac.za</a>
University of Pretoria	Gauteng	Tel: 012 420 3111 Web: <a href="http://www.up.ac.za">http://www.up.ac.za</a> Email: <a href="mailto:vida.moses@up.ac.za">vida.moses@up.ac.za</a>



University Name:	Campuses Situated in:	Contact Information:
University of South Africa	South Africa (All Provinces)	Tel: 012 441 5888 Web: <a href="http://www.unisa.ac.za">http://www.unisa.ac.za</a> Email: <a href="mailto:study-info@unisa.ac.za">study-info@unisa.ac.za</a>
University of Stellenbosch	Western Cape	Tel: 021 808 9111 Fax: 021 808 3822 Web: <a href="http://www.maties.com">http://www.maties.com</a> Email: <a href="mailto:info@sun.ac.za">info@sun.ac.za</a>
Sol Plaatje University	Northern Cape	Tel: 053 491 0000 Web: <a href="http://www.spu.ac.za">http://www.spu.ac.za</a> Email: <a href="mailto:information@spu.ac.za">information@spu.ac.za</a>
University of the Western Cape	Western Cape	Tel: 021 959 2911 Web: <a href="http://www.uwc.ac.za">http://www.uwc.ac.za</a> Email: <a href="mailto:info@uwc.ac.za">info@uwc.ac.za</a>
University of the Free State	Free State	Tel: 051 401 9111 Web: <a href="http://www.ufs.ac.za">http://www.ufs.ac.za</a> Email: <a href="mailto:info@ufs.ac.za">info@ufs.ac.za</a>
University of Venda	Limpopo	Tel: 015 962 8000 Fax: 015 962 4749 Web: <a href="http://www.univen.ac.za">http://www.univen.ac.za</a> Email: <a href="mailto:registrar@univen.ac.za">registrar@univen.ac.za</a>
University of the Witwatersrand	Gauteng	Tel: 011 717 1000 Web: <a href="http://www.wits.ac.za">http://www.wits.ac.za</a>
University of Zululand	Kwazulu-Natal	Tel: 035 902 6000 Web: <a href="http://www.unizulu.ac.za">http://www.unizulu.ac.za</a>
Walter Sisulu University	Eastern Cape	Tel: 047 502 2111 Fax: 047 532 6820 Web: <a href="http://www.wsu.ac.za">http://www.wsu.ac.za</a> Email: <a href="mailto:postmaster@wsu.ac.za">postmaster@wsu.ac.za</a>
Cape Peninsula University of Technology	Western Cape	Tel: 021 959 6767 Web: <a href="http://www.cput.ac.za">http://www.cput.ac.za</a> Email: <a href="mailto:info@cput.ac.za">info@cput.ac.za</a>
Central University of Technology	Free State	Tel: 051 507 3911 Web: <a href="http://www.cut.ac.za">http://www.cut.ac.za</a>
Durban University of Technology	Kwazulu-Natal	Tel: 0860 10 31 94 Web: <a href="http://www.dut.ac.za">http://www.dut.ac.za</a> Email: <a href="mailto:info@dut.ac.za">info@dut.ac.za</a>
Mangosuthu University of Technology	Kwazulu-Natal	Tel: 031 907 7111 Web: <a href="http://www.mut.ac.za">http://www.mut.ac.za</a>
Tshwane University of Technology	Gauteng	Tel: 086 110 2421 Fax: 012 382 5114 Web: <a href="http://www.tut.ac.za">http://www.tut.ac.za</a> Email: <a href="mailto:general@tut.ac.za">general@tut.ac.za</a>



Below you will find a list of community colleges around South Africa. Find one near you and get in touch with them to find out more information about the learning programmes they offer.

## LIST OF COMMUNITY COLLEGES

Name of College:	Address:	Province:	Identified Site for Hosting:
Eastern Cape Community Education and Training Centre	Nelson Mandela Metropolitan University, Missionvale Campus PO Box 77000 Port Elizabeth 6031	Eastern Cape	Nelson Mandela Metropolitan University
Free State Community Education and Training College	Manguang University Community Partnership Programme (MUCPP)	Free State	University of Free State – South Campus (MUCPP)
Gauteng Community Education and Training College	CJC Crown Mines Campus Shaft 17 Road Crown Mines 2092 PO Box 4137 Southgate Mall 2082	Gauteng	CJC Crown Mines Campus
Kwazulu-Natal Community Education and Training College	DUT Indumiso Campus FJ Sithole Street 3201 Edendale CC Imbali Pietermaritzburg	Kwazulu-Natal	Durban University of Technology
Limpopo Community Education and Training College	Pax College 656 LS Valkop Farm Matlala Road Polokwane Municipality 0700	Limpopo	Catholic Institute for Education - Pax College
Mpumalanga Community Education and Training College	Nkangala TVET College CN Mahlangu Campus Training Centre Road Industrial Site Siyabuswa 0472	Mpumalanga	Nkangala TVET College



## LIST OF COMMUNITY COLLEGES

Name of College:	Address:	Province:	Identified Site for Hosting:
Northern Cape Community Education and Training College	Northern Cape Rural TVET College Upington Campus 1 Steve Naude Street Upington 8800	Northern Cape	Northern Cape Rural TVET College
North West Community Education and Training College	Mmakau ABET Project Stand No. 1783, Hebron, 2193 P.O. Box 1498 Rosslyn 0200	North West	Catholic Institute for Education
Western Cape Community Education and Training College	ELGIN Learning Foundation No. 9 Appletizer Road Grabouw P.O. Box 654 Grabouw 7160	Western Cape	Elgin Community College - Grabouw





SETA Name:	Website:
Agricultural SETA (AgriSETA)	<a href="http://www.agriseta.co.za/">http://www.agriseta.co.za/</a>
Bank SETA	<a href="http://www.bankseta.org.za/">http://www.bankseta.org.za/</a>
Construction SETA (CETA)	<a href="http://www.ceta.org.za/">http://www.ceta.org.za/</a>
Chemical Industries SETA (CHIETA)	<a href="http://www.chieta.org.za/">http://www.chieta.org.za/</a>
Culture Arts, Tourism, Hospitality and Sports SETA (CATHSETA)	<a href="http://www.cathseta.org.za/">http://www.cathseta.org.za/</a>
Energy and Water SETA (EWSETA)	<a href="http://www.eseta.org.za/">http://www.eseta.org.za/</a>
Education Training and Development Practices SETA (ETDPSETA)	<a href="http://www.ETDPSETA.org.za/">http://www.ETDPSETA.org.za/</a>
Financial and Accounting SETA (FASSET)	<a href="http://www.fasset.org.za/">http://www.fasset.org.za/</a>
Fibre Processing and Manufacturing SETA (FP&M SETA)	<a href="http://www.fpmseta.org.za/">http://www.fpmseta.org.za/</a>
Food and Beverage Manufacturing Industry SETA (Foodbev SETA)	<a href="http://www.foodbev.co.za/">http://www.foodbev.co.za/</a>
Health and Welfare SETA (HWSETA)	<a href="http://www.hwseta.org.za/">http://www.hwseta.org.za/</a>
Insurance Sector Education and Training Authority (INSETA)	<a href="http://www.inseta.org.za/">http://www.inseta.org.za/</a>
Local Government SETA (LGSETA)	<a href="http://www.lgseta.co.za/">http://www.lgseta.co.za/</a>
Media, Advertising, Information and Communications Technology SETA (MICT SETA)	<a href="http://www.mict.org.za/">http://www.mict.org.za/</a>
Manufacturing, Engineering and Related Services SETA (MERSETA)	<a href="http://www.merseta.org.za/">http://www.merseta.org.za/</a>
Mining Qualifications Authority SETA (MQA)	<a href="http://www.mqa.org.za/">http://www.mqa.org.za/</a>
Public Service SETA (PSETA)	<a href="http://www.pseta.gov.za/">http://www.pseta.gov.za/</a>
Safety and Security SETA (SASSETA)	<a href="http://www.sasseta.org.za/">http://www.sasseta.org.za/</a>
Services SETA	<a href="http://www.serviceseta.org.za/">http://www.serviceseta.org.za/</a>
Transport SETA (TETA)	<a href="http://www.teta.org.za/">http://www.teta.org.za/</a>
Wholesale and Retail SETA (WRSETA)	<a href="http://www.wrseta.org.za/">http://www.wrseta.org.za/</a>

## NOTES




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