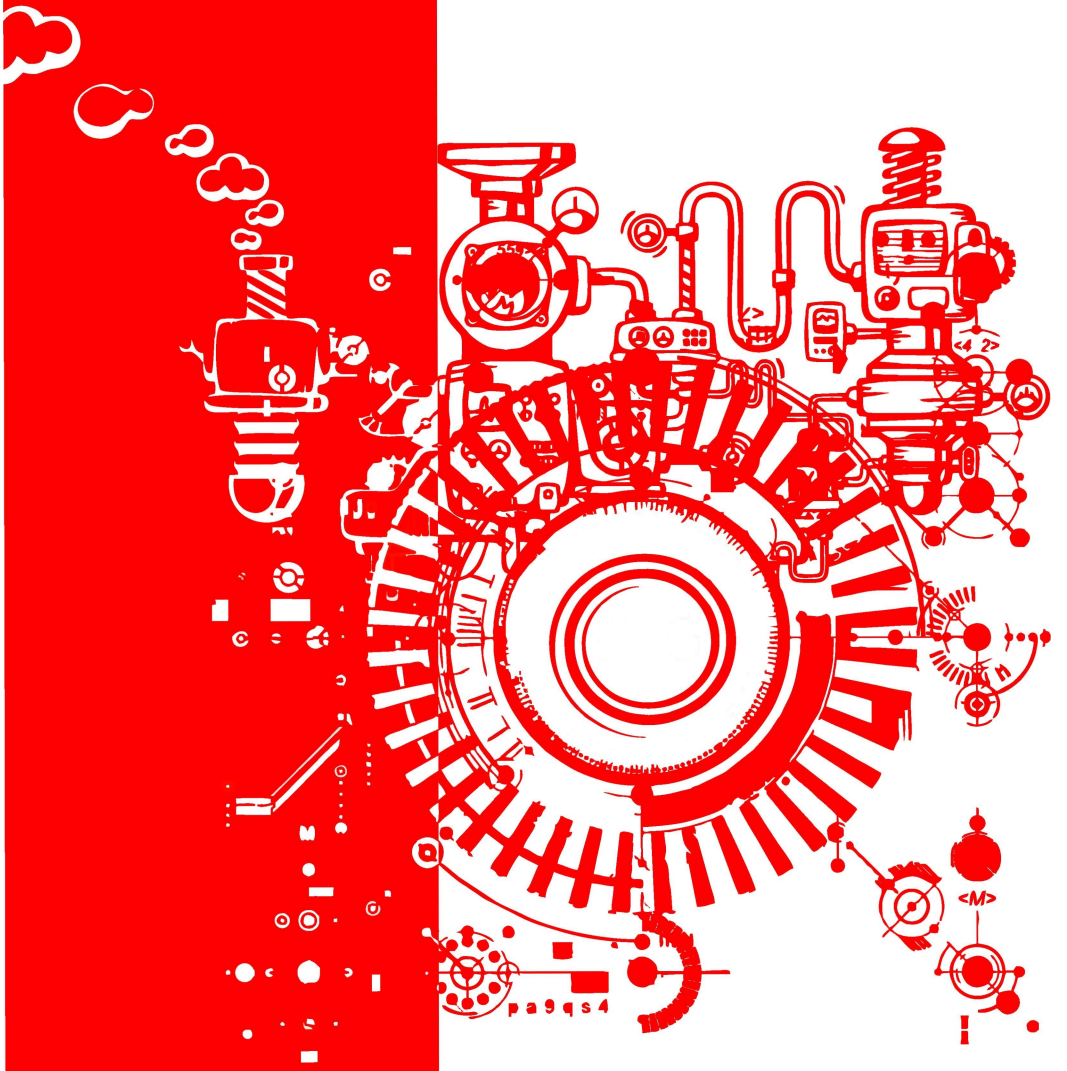
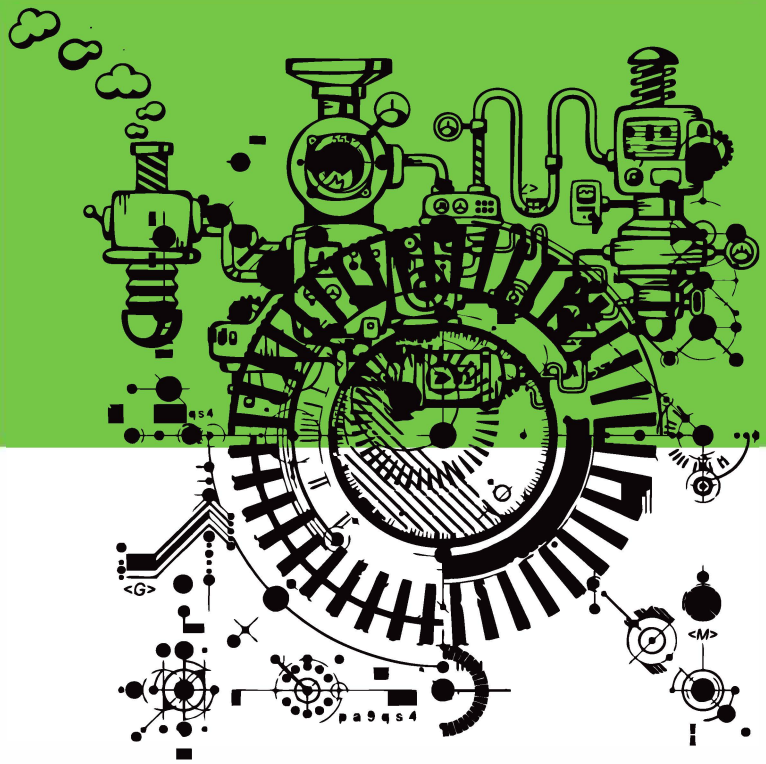
TRANSNET



Career Booklet

Think Opportunity

THINK OPPORTUNITY



Follow us on

@Transnet.SOC.Ltd @follow_transnet Transnet SOC Ltd Welcome to Transnet TransnetSOCLTD

or visit

www.transnet.net

CONTENTS

THE COMPANY

WHO WE ARE

Transnet SOC Ltd is South Africa's state-owned freight transport and logistics company and is the custodian of the country's rail, ports and pipeline networks.

With over 60,000 employees and assets in excess of R340 billion, Transnet is uniquely positioned to provide integrated, seamless transport solutions for its customers in the bulk and manufacturing sectors. This is part of our drive to improve the efficiency and competitiveness of the South African economy.

OUR MANDATE

To assist in lowering the cost of doing business in South Africa, enabling economic growth and ensuring security of supply through providing appropriate port, rail and pipeline infrastructure in a cost-effective and efficient manner, within acceptable benchmarks.

OUR VISION

Fueling Africa's growth and development as the leading provider of innovative supply chain solutions.

OUR MISSION

Linking economies; connecting people; growing Africa!

THE WAY WE WORK

Transnet's activities are spread across five operating divisions countrywide.

TRANSNET FREIGHT RAIL

The largest of our operating divisions, **Freight Rail**, transports bulk and containerised freight by rail. The network and rail services provide strategic links between ports and production hubs, and connect with the railways of the Southern Development Community region. **Freight Rail** transports bulk and containerised freight along 30,500 km of which 1,500 km are heavy haul lines for export coal and export iron ore.

TRANSNET NATIONAL PORTS AUTHORITY

Responsible for the safe, efficient and effective economic functioning of the South African ports system, **National Ports Authority** owns and operates eight commercial ports at Durban, Richards Bay, Cape Town, Port Elizabeth, Ngqura, Mossel Bay, Saldanha, and East London.

The business is divided into two key operational areas:

- Port infrastructure, including all planning, development and maintenance
- Maritime operations, including pilotage, towage, vessel berthing services, dredging, and lighthouse and navigation systems.

TRANSNET PORT TERMINALS

Port Terminals owns and operates 16 cargo terminals. The division provides cargo-handling services to a wide spectrum of customers in four major market sectors:

- Automotive
- Containers
- Bulk
- Break-bulk

TRANSNET PIPELINES

With 3,000 kilometres of underground pipelines traversing five provinces, **Pipelines** provides an efficient and reliable end-to-end logistics service to the oil industry of South Africa and Southern Africa. The division's infrastructure includes depots, pump stations, workshops, a tank farm and a refractionator.

TRANSNET ENGINEERING

Transnet Engineering is an Advanced Manufacturing Division of Transnet that designs, manufactures, supplies, converts and remanufactures rolling stock in Africa.

Core to the business, Transnet Engineering researches, designs, manufactures, supplies and maintains locomotives, wagons and coaches in the African continent and to the rest of the world.

It is an Original Equipment Manufacturer (OEM) of wagons and coaches and will soon launch its own African locomotive, especially designed for African conditions.

It is a Centre of Excellence in Africa with more than 12 000 agile and capable employees across six main centres and over 132 depots in South Africa. Transnet Engineering is made up of nine product-focused businesses:

- Wagon business
- Locomotive business
- Coach business
- Rolling stock equipment business
- Rotating machine business
- Wheel business
- Auxiliary port business
- Foundry business
- Port business

TRANSNET SPECIALIST UNITS

The company also maintains three specialist units:

- **Transnet Group Capital** is a "craddle-to-grave" solutions unit which advises Transnet and other potential clients on capacity solutions through capital planning, advisory services, capacity development, engineering, project and construction management services.

- **Transnet Property** manages the company's property portfolio of commercial and residential properties, which make up approximately 13% of the total Transnet property portfolio. This substantial portfolio makes Transnet one of South Africa's most significant property owners.

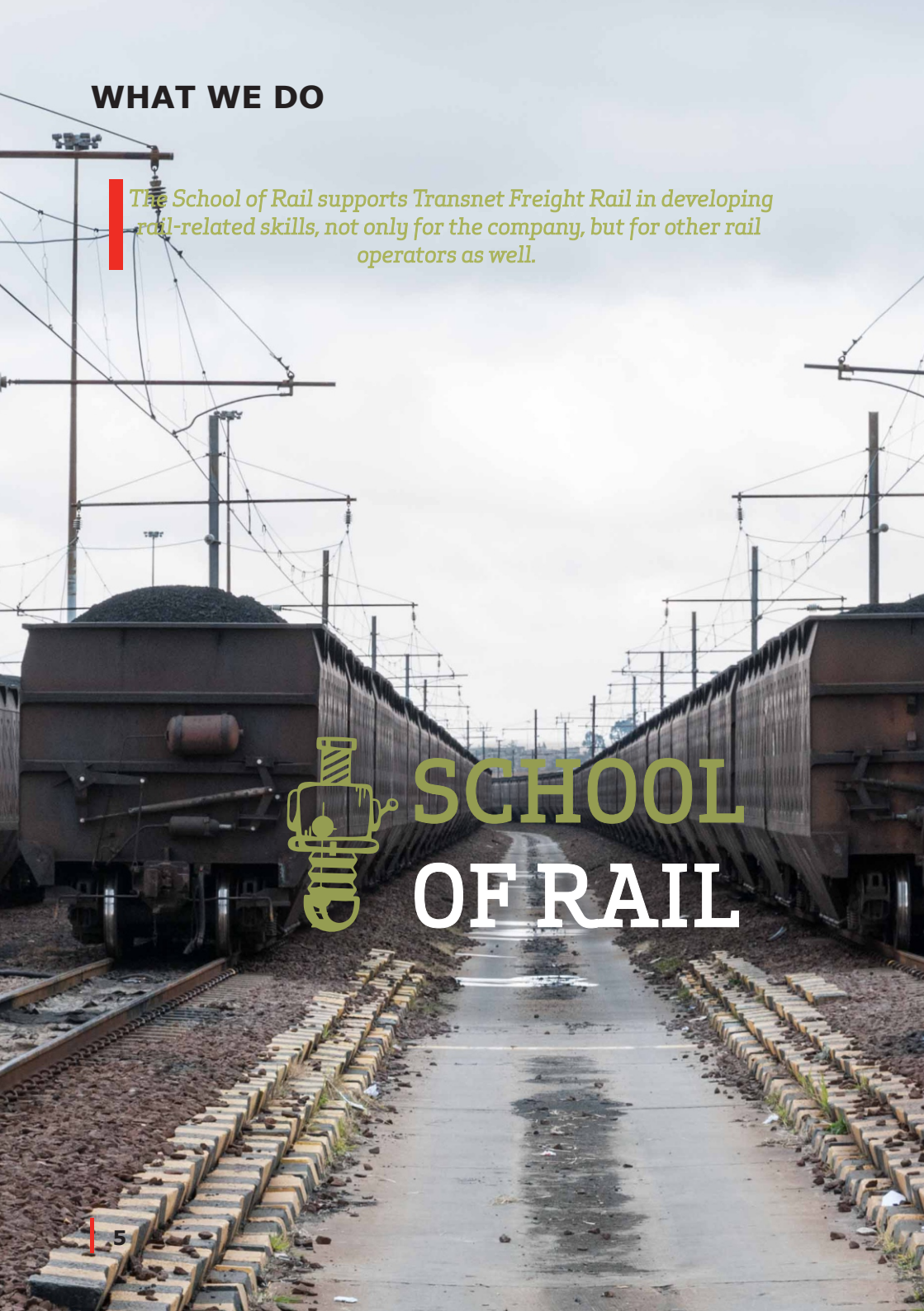
- **Transnet Foundation** takes care of all our Corporate Social Investment (CSI) efforts, which include five major programmes in health, community facilities, educational support, programmes for orphans, and volunteer initiatives in which employees help impart the skills that assist in eventual job creation.

A COMMITMENT TO PEOPLE

At Transnet we are committed to nurturing talent, transferring skills, expanding our business, and playing a central role in helping to create jobs for the betterment of all South Africans.
If you think you have a part to play and would like to assure yourself of an outstanding career opportunity, then read on.

WHAT WE DO

The School of Rail supports Transnet Freight Rail in developing rail-related skills, not only for the company, but for other rail operators as well.



SCHOOL OF RAIL

PARTNERING FOR TRAINING AND SKILLS

Working in collaboration with local, national and international universities, business schools and service providers, the Transnet School of Rail offers training in various fields such as Operations, Safety, Rail Network and Technical supervision, and Generic Business Courses.

WHERE WE ARE

Transnet Freight Rail's School of Rail operates 11 campuses nationwide at:

- Esselenpark in Kempton Park
- Kimberley
- Bloemfontein
- Wentworth in Durban
- Bellville in Cape Town
- Koedoespoort in Pretoria
- Parkhill in Germiston
- Port Elizabeth
- Ermelo
- Saldanha
- Richards Bay


18 843
TRANSNET
freight rail

Places for Courses

The school runs operational training programmes at the Esselenpark Campus as well as at the decentralised training centres such as Koedoespoort, Kimberley, and Bloemfontein. Rail network and technical training courses are mostly offered at the Esselenpark campus, although there are some at decentralised centres such as Ermelo.

Operations Training

Operations Training provides training for train drivers and train control officers, as well as for those concerned with yard operations and customer services. The courses include both theoretical and practical training. The School of Rail has state-of-the-art train simulators to enhance the training.

Any company with employees involved in train movement and the shunting of rail vehicles will benefit from this kind of training

Rail Network and Technical Training

Courses in these fields include training and development in various disciplines such as rail track construction, maintenance and welding, overhead track equipment construction and maintenance, sub stations, railway signalling and telecommunication.

Rail Track Construction and Maintenance Training specialises in the training and development of people who build and maintain the railway lines. This training also includes protection duties and different welding courses. It is the only one of its kind in South Africa and any company making use of this training will have highly-skilled employees within this working environment.

Railway Signalling Training is the only centre in South Africa that provides training in railway signalling. This training, which includes all kinds of signalling equipment and telecontrol, is highly sought after and is linked to further education and training institutions where courses provide for additional development for people who work in this discipline.

Overhead Traction and Sub-stations Training provides the necessary skills and knowledge to enable employees to comply with the compulsory training stipulation of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), covering employees who work on electrified sections of 11 KV, 3 KV DC and 25/50 KV AC, and whose duties require them to work in the vicinity of, or near, exposed live high-voltage electrical equipment.

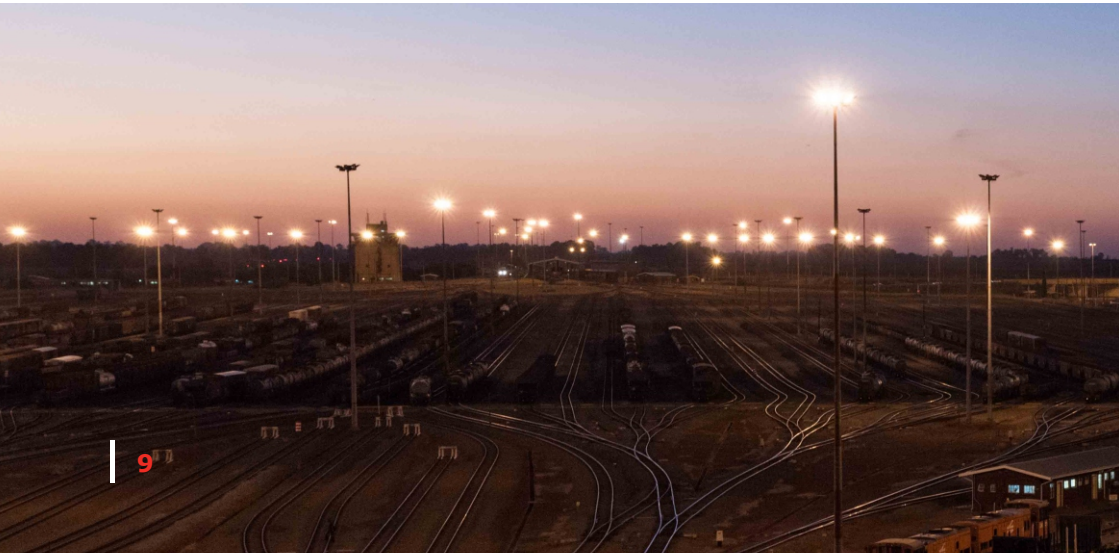
A wide reach:
The school offers Overhead Traction and Sub-stations training not only to Transnet Freight Rail employees but to other operating divisions within Transnet such as Transnet Engineering, Transnet Pipelines, and Transnet Port Terminals, as well as to external organisations such as the Passenger Rail Agency of South Africa (PRASA).

Telecommunications Training provides training on Transnet Freight Rail's radio communication network equipment and technology which forms part of the transmission network carrying radio and data communication used in the monitoring of equipment on the rail network. The courses provide Transnet Freight Rail employees with the skills required for remote communication and in monitoring the status of the division's equipment and assets.

SCHOOL OF RAIL

The courses we offer, and where we offer them

COURSE	DURATION	ENTRY REQUIREMENTS	WHERE
GENERIC TRAINING			
Rubber Wheels Training	1 to 5 days	None	Esselenpark in Kempton Park, Bellville in Cape Town, Bloemfontein in Free State, Wentworth in Durban, Kimberly in Northern Cape.
OPERATIONS TRAINING			
Yard Operations Training	45 Days	Grade 12	Park Hill Germiston in Gauteng, Esselenpark in Kempton Park, Bellville in Cape Town, Bloemfontein in Free State, Wentworth in Durban, Kimberley in Northern Cape, Port Elizabeth in Eastern Cape, Koedoespoort in Pretoria, Ermelo in Mpumalanga.
Train Control Training	± 65 Days	Grade 12	Esselenpark in Kempton Park, Wentworth in Durban and Bellville in Cape Town.
Train Driver Assistance Training	+/- 85 Days	Grade 12	All centres
Train Driver Training	+/- 85 Days	Grade 12	All centres



COURSE	DURATION	ENTRY REQUIREMENTS	WHERE
TECHNICAL TRAINING			
Integrated Technology (Transport Telecoms and IT Training)	12 Months	Grade 12 and 18 months studies in Electrical Engineering (LC)	All centres
Overhead Track Equipment Linesman	2 Years & 6 months	Grade 12	Esselenpark in Kempton Park
Substations Electrician Training	Electrical traction system : 6 months Electrical power system : 5 weeks	Trade Red Seal qualification	Esselenpark in Kempton Park
Track Welder Training	Phase 1: 110 days Not more than 2 months Phase 2: 70 days OJT 3 months or more Advance: 30 days	Grade 10	Esselenpark in Kempton Park
Track Master Training	Phase 1: 80 days Phase 2 :70 days Phase 3: 100 days OJT: 8 weeks after each phase Advance: 50 days Train working rules: 10 weeks RRV(road rail vehicle): 10 days	Grade 12	Esselenpark in Kempton Park
Railway Signals Training	12 Months	Grade 12 / Engineering Diploma / Degree	Esselenpark in Kempton Park

SCHOOL OF RAIL

Who we want

If you're interested in rail operations, rail network construction and maintenance, technical matters, railway engineering or safety programmes, then you can find the course that suits you at the Transnet School of Rail.

What do I need?

The minimum entry requirements differ and are dependent on the School of Rail courses you choose. However, a matric certificate with Mathematics, English and or Science is the standard basic requirement.

How do I apply?

You should apply only when you see the advertisements that we place in local and national newspapers and Transnet careers portal on **www.transnet.net**. You then need to submit an application letter together with your CV, a certified copy of your Identity Document (ID) and your Matric Certificate to the relevant Human Resources Manager.

Where do I find more information?

There are a large number of courses available from the School of Rail, and we have a full training calendar obtainable from the Esselenpark campus.

Please contact the School of Rail on (011) 929-1408 to find out how to obtain the School of Rail Training Calendar.

HOW TO REACH US

Campus	Course/Training	Number
School of Rail, Esselenpark Campus	Yard Operations and Train Control Training	(011) 929-1206
School of Rail, Esselenpark Campus	Railway Signalling Training	(011) 929-1338
School of Rail, Esselenpark Campus	Engineering, Technician and Artisan Training	(011) 929-1570
School of Rail, Esselenpark Campus	Rail Track Construction and Maintenance and Welding Training	(011) 929 1207 (011) 929 1209
School of Rail, Esselenpark Campus	Overhead Track Equipment and Substations Training	(011) 929-1571
School of Rail, Esselenpark Campus	Telecommunications Training	(011) 929-1327
School of Rail, Esselenpark Campus	Cargo Coordination, Lifting Equipment and Driver Training	(011) 929-1241
School of Rail, Esselenpark Campus	Safety Training	(011) 929-1929
School of Rail, Kimberley Campus	Train Movement, Yard Operations and Train Control Training	(053) 838-3012
School of Rail, Bellville Campus	Train Movement, Yard Operations and Train Control Training	(021) 940-3581
School of Rail, Parkhill Campus (Germiston)	Train Movement, Yard Operations, Train Control and Order Entry Training	(011) 820-2273
School of Rail, Koedoespoort Campus (Pretoria)	Train Movement, Yard Operations and Train Control Training	(012) 842-5372
School of Rail, Durban Campus (Wentworth)	Train Movement, Yard Operations and Train Control Training	(031) 361-5871
School of Rail, Bloemfontein Campus	Train Movement, Yard Operations and Train Control Training	(051) 408-2793
School of Rail, Port Elizabeth Campus	Train Movement, Yard Operations and Train Control Training	(041) 507-2847
School of Rail, Bayhead Campus	Rubber Wheels Driver Training	(031) 361 4418

Our primary responsibility is to develop and enhance the key technical, maintenance and engineering capacity that is critical in sustaining Transnet's requirements, and to produce people with the ability to support Transnet's Market Demand Strategy.

SCHOOL OF ENGINEERING

Changing lives through learning and development

The Transnet School of Engineering is a well-established and highly-regarded training institution which focuses on the delivery of various competencies in the engineering industry.

Skills for needs

The School offers a variety of courses which provide for a range of competencies required for every level of work from the semi-skilled to apprenticeships, artisanships, engineering and logistics and supply chain practice, right through to supervisory and leadership development.

The School also boasts an impressive external and private client base in South Africa and other countries in the Southern African Development Community.

WHERE WE ARE

School of Engineering campuses are located countrywide within the company's various centres and depots:

- Western Cape: Salt River (branches in Bellville and Saldanha)
- Eastern Cape: Uitenhage (branches in Swartkops, North End and East London)
- Free State: Bloemfontein
- Northern Cape: Kimberley
- KwaZulu-Natal: Durban (satellite branch in Richards Bay)
- Gauteng: Koedoespoort in Pretoria and Germiston (branches in Capital Park, Sentrarand and Nelspruit.

Accreditation and compliance

The School of Engineering adheres to high standards of quality and safety, with both ISO 9001:2008 and OHSAS 18001 certification. With a long history in engineering-related training we have accreditation from the Transport Education and Training Authority (TETA), the Manufacturing, Engineering and Related Services SETA (Merseta), the Services Sector Education and Training Authority (SSETA) and other Sector Education and Training Authorities. Our excellent work in the field of engineering training has been recognised with various awards, including:

- Africa Rail: Best Skills Service Provider – Winner 2010 and 2011
- BHP: Best Skills Provider – Winner 2012
- BHP: Best Innovative Training Provider – 2nd Runner-up 2013
- NOSCAR Award – Winner 2012

SCHOOL OF ENGINEERING

Partnerships for quality

We maintain excellent relationships and partnerships with Original Equipment Manufacturers. In addition to our association with local Further Education and Training (FET) and Department of Higher Education and Training (DHET) institutions around the country, we also partner with the Coach Lab Innovation Hub under the Council for Scientific and Industrial Research (CSIR). We are also registered as an assessment centre for Artisan Trade Testing in various trades.

PROGRAMMES FOR EVERYONE

The facilitators at the School of Engineering campuses have been selected for their knowledge, expertise, and many years of experience in coaching and mentoring in various fields of engineering. The School of Engineering offers learning opportunities for learners with a Grade 12 qualification as well as learners with work experience who need to enhance their knowledge capacity.

Various courses may also be tailored and designed by our curriculum development section.

Can I enrol at the School of Engineering?

If you are a South African citizen, have a matric, or if you're someone with work experience or a graduate looking to enhance your knowledge, then the School of Engineering offers learning opportunities for you. Preference will be given to African females, learners with disabilities and learners from rural areas.

Apprenticeship Programme

The apprenticeship programme offers vocational training in 14 trades.

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Tool Maker	Toolmakers produce precision tools like jigs, dyes and moulds that are used by engineering craftspeople to manufacture a range of products. They work mainly with metals, alloys and composite materials known as 'stocks' or castings. Tool Makers work on conventional and Computer Numerically Controlled machines which produce large quantities of components to exactly the same standard and they can learn to operate a variety of Computer Numerically Controlled machine tools such as: ♦ lathes ♦ grinding machines ♦ milling machines ♦ cutting machines ♦ drills and presses ♦ machining centres that combine the above functions.	**As a toolmaker, you will need:** ♦ The ability to read engineering drawings ♦ Good practical and technical skills ♦ An understanding of the properties of materials ♦ The ability to work to a high degree of accuracy ♦ The ability to picture how a finished product will look ♦ Good maths skills ♦ Good Computer skills ♦ The ability to work without supervision ♦ Good powers of concentration.	Toolmaker works in a factory or workshop (e.g. Rolling Stock Equipment, Wheel Shop), carrying out the following activities: ♦ Working with 2D and 3D computer aided design and manufacturing software (CAD/CAM) ♦ Marking out the tool design on the 'stock' or casting following engineering drawings ♦ Cutting and shaping the part using a combination of lathes, presses, grinders and cutting machines, which are frequently computer controlled ♦ Checking the tool's dimensions with precision measuring instruments like micrometers, gauges and co-ordinate measuring machines ♦ Carrying out basic machine maintenance ♦ Setting up and operating Computer Numerically Controlled Machines.	Tool makers work mainly with metals but could also deal with wood, composite materials and plastics. Most opportunities would be in the mechanical engineering, motor vehicle, aerospace and shipbuilding industries. There could also be some vacancies in engineering maintenance, such as rail transport or power generation. There has been a shortage of skilled Computer Numerically Controlled machinists in engineering for many years, which should increase the chances of getting work if you have the right skills. With experience and further training, you could move into supervisory or quality inspection jobs, or move up to technician-level roles in an engineering design or drawing office.
Turner and Machinist	Turner and Machinist create precision parts used in manufacturing and engineering. They use both convetional and Computer Numerically Controlled machine tools to cut, drill and finish components. Turner and Machinists work on Computer Numerically Controlled machines which produce large quantities of components to exactly the same standard and they can learn to operate a variety of Computer Numerically Controlled machine tools such as: ♦ lathes ♦ grinding machines ♦ milling machines ♦ cutting machines ♦ drills and presses ♦ machining centres that combine the above functions.	**As a Turner and Machinist, you will need:** ♦ The ability to read engineering drawings and instructions ♦ Good practical skills ♦ Maths and computer skills ♦ The ability to work with a high level of accuracy ♦ Concentration and focus ♦ The ability to work unsupervised.	Turner and Machinist work in a factory or workshop (e.g Rolling Stock Equipment, Wheel Shop) . Most of the parts made would are used in the automotive, power and manufacturing industries. Turner and Machinist typical duties would include: ♦ Programming the machine tool with data taken from technical drawings ♦ Planning the most efficient order of machine operations for each job ♦ Choosing the right tools for each stage ♦ Setting the cutting speeds and tolerance levels ♦ Carrying out the operations ♦ Checking that work meets quality and technical standards ♦ Routine maintenance.	Due to the growth of computer-controlled machining and precision casting methods, your prospects of finding work would be improved if you have Computer Numerically Controlled machine skills. With experience, you could move to a workshop supervisor or machine maintenance role. With further training you could qualify as an engineering technician.

SCHOOL OF ENGINEERING

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Electro-mechanician	Electromechanicians install service and repair engineering machinery and equipment. You could work on mechanical, electrical and hydraulic systems. For most tasks they use a range of hand and power tools, including welding equipment. They follow technical plans drawn up by senior artisans or engineers. Each has several options, depending on the exact duties. These would include safe working and engineering installation, testing and maintenance. As an Apprentice electromechanician, they are trained in basic engineering skills in a workshop. The Apprentice then spends time working under the supervision of experienced electromechanicians and also be given training on health and safety and work towards an industry qualification.	**As a electromechanician you will need:** ♦ Problem solving skills excellent mechanical and electrical skills ♦ Good problem-solving skills ♦ The ability to work alone and as part of a team ♦ Good communication skills ♦ English and maths skills to work with technical drawings and write reports ♦ A knowledge of safe working practices ♦ An understanding of industry quality standards ♦ A good level of fitness ♦ A willingness to work flexibly to cover shifts and unsocial hours.	Electromechanician spend most of the time in a depot or engineering workshop. Some tasks could be very dirty and greasy, but Transnet provides with protective clothing and footwear. There is also a strict policy on drug and alcohol use. They could be tested for drugs or alcohol at any time as they are sometimes required to make use of company vehicle to start shifts outside of normal public transport hours. **Typical activities of a electromechanician include:** Carrying out regular maintenance checks on systems, such as brakes and couplings taking apart and testing mechanical, electrical and pneumatic systems before reassembly writing reports and updating maintenance records. **In preventative maintenance, your duties would include;** Making scheduled checks on machinery and parts finding and fixing faults, and recalibrating instruments oiling and cleaning machinery and parts carrying out scheduled overhaul and replacing parts that have reached the end of their working life. Emergency maintenance tasks would include: responding immediately to machinery breakdown fixing faults on site or arranging for replacement equipment to be installed.	**Typical activities of a electromechanician include:** ♦ Carrying out regular maintenance checks on systems, such as brakes and couplings ♦ Taking apart and testing mechanical, electrical and pneumatic systems before reassembly ♦ Writing reports and updating maintenance records ♦ Fitting out new machinery and equipment parts ♦ Inspecting damage and conduct fault finding ♦ Repairing or replacing parts.
Electrician	Electricians fit and repair electrical circuits and wiring in people's homes and businesses. They also install and maintain electrical equipment, instruments and machinery.	**As an electrician, you will need:** ♦ Good practical skills an ability to follow technical drawings, building plans and wiring diagrams ♦ An ability to work carefully, methodically and safely ♦ A head for heights and willingness to work in all sorts of weather ♦ A willingness to work in confined spaces ♦ Good written and spoken communication skills ♦ An ability to work in a team as well as on your own ♦ A flexible approach ♦ Good problem-solving skills.	Electricians work in a very wide range areas, from bringing power to people's homes to major engineering projects. They also work with renewable technology, such as wind turbines, 'smart' heating systems and photovoltaic systems that produce solar power. Electricians install, inspect and test equipment, make sure that electro technical systems work, and find and fix faults. Depending on the exact role, electricians may have to work in cramped spaces to reach electrical cabling and equipment, and they may sometimes work at heights on scaffolding.	**Electrotechnical careers are divided into different roles:** ♦ Installation electrician; Installing power systems, lighting, fire protection, security and data-network systems in all types of buildings ♦ Maintenance electrician; Checking systems regularly to make sure that they are working efficiently and safely ♦ Electrotechnical panel builders; Building and installing control panels that operate the electrical systems inside buildings ♦ Machine repair and rewind electrician; Repairing and maintaining electrical motors and other machinery like transformers to make sure that they work correctly ♦ Highway systems electrician; Installing and maintaining street lighting and traffic management systems that tell the public what they need to know when they're on the roads and motorways.

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Sheet metal worker/ Plater	Sheet metal is metal formed by an industrial process into thin, flat pieces. It is one of the fundamental forms used in metalworking and it can be cut and bent into a variety of shapes. Countless everyday objects are constructed with sheet metal. Thicknesses can vary significantly; extremely thin thicknesses are considered foil or leaf, and pieces thicker than 6 mm (0.25 in) are considered plate. Sheet metal workers make products and components for the engineering, construction and manufacturing industries. They cut metal sheets to precise designs with equipment like laser cutters and join them together using methods like welding and riveting.	**As a sheet metal worker, you will need:** ♦ Practical skills for using tools and equipment ♦ Good concentration levels ♦ Maths skills for making measurements ♦ Basic computer skills ♦ An understanding of technical drawings ♦ The ability to work without direct supervision and to work as part of a team ♦ A good fitness levels ♦ A good head for heights, for some jobs.	Sheet metal workers make products and components for the engineering, construction and manufacturing industries. They cut metal sheets to precise designs with equipment like laser cutters and join them together using methods like welding and riveting.	**Sheet Metal Work duties involve:** ♦ Marking out sections following engineering drawings and instructions ♦ Shaping and cutting out sections using hand tools and computer numerically controlled machines, like laser cutters, presses and rollers ♦ Finishing items with tools like grinders and polishers to smooth down rough edges ♦ Assembling sections, using riveting, welding and bolting methods in heavy industry, where you might be known as a plater, you would use thicker metal plate sections to build up structures, for instance drilling rig platforms.

SCHOOL OF ENGINEERING

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Welder	Welding is a fabrication or sculptural process that joins materials, usually metals or thermoplastics, by causing combination. This is often done by melting the workpieces and adding a filler material to form a pool of molten material (the weld pool) that cools to become a strong joint, with pressure sometimes used in conjunction with heat, or by itself, to produce the weld. This is in contrast with soldering and brazing, which involve melting a lower-melting-point material between the workpieces to form a bond between them, without melting the work pieces. Welders cut, shape and join sections of metal plate and pipes in a wide range of industries. These include construction and engineering, transport, aerospace, and offshore oil and gas. They also carry out repairs on manufacturing equipment and machinery.	**As a welder you will need to have:** ♦ Good hand-to-eye coordination ♦ The ability to work accurately ♦ Good concentration levels ♦ The ability to work without direct supervision ♦ The ability to understand technical plans and drawings ♦ Good maths skills to work out measurements ♦ The ability to solve problems ♦ An understanding of safe working practices.	**As a welder, you would:** ♦ Select and lay out materials to be cut or joined ♦ Follow engineering instructions and drawings ♦ Use the most suitable welding method for the job ♦ Inspect and test cuts and joins, using precision measuring instruments, such as a micrometer ♦ Operate semi-automatic spot-welding equipment (often found on high volume production lines). As well as working with metals and alloys, you may also cut and join composite materials, such as plastics, using specialist welding methods. Common types of welding include oxyacetylene, metal inert gas, manual metal arc, tungsten inert gas, laser and ultrasonic. Welders usually wear protective clothing, such as a face-shield, apron or gloves. In some cases you might need to use specialist safety equipment, for example breathing apparatus for underwater welding work, or a safety harness for working at heights.	Depending on your level of training and experience, you would be classed as a semi-skilled or skilled welder.You would normally have to pass competency tests for the type of welding work you carry out. These tests show that your work meets the codes.There are many codes specific to particular welding work. For more details about coding tests, as stipulated by South African Welding Institutes. You could also contact the Welding Institute about their range of training schemes for welding methods, as well as inspection and testing qualifications. They also have information about the industries in which welding skills play a key role. Welding knowledge and skills can be used in many industries. Examples include civil engineering, engineering construction, agricultural engineering, power, shipbuilding and repair, renewable energy, and oil and gas. You may also have the opportunity to work abroad on overseas construction projects. The promotion options include becoming a foreman/forewoman and shift supervisor, or fabrication workshop manager. With experience, you may have the option to work in welding inspection, quality control and non-destructive testing.

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Blacksmith	Blacksmiths shape and join metals such as steel, iron, copper and bronze to make decorative and everyday items. These can include wrought iron gates, railings, furniture, tools and horseshoes.	**As a blacksmith you need:** ♦ Good hand-to-eye coordination ♦ Practical skills and technical ability ♦ Problem solving skills ♦ Creative and design skills if you want to specialise in artistic work ♦ Motivation and self-discipline as you would often work alone ♦ Good communication skills for dealing with customers Maths ability for measuring and making calculations ♦ Business skills for preparing quotes and managing your accounts if you are self-employed.	**As a blacksmith you would heat metal in a forge until it is soft and workable. You would then hammer, bend and cut the metal into shape before it cools again. You could specialise in:** ♦ Industrial work, making items such as specialist tools, fire escapes or security grills ♦ Artistic or architectural metalwork, such as decorative ironwork, gates, sculptures and furniture. **Depending on the type of blacksmithing you do, your work would include:** ♦ Working with a forge or furnace ♦ Using traditional hand tools such as hammers, punches and tongs or anvils ♦ Using power tools, such as power hammers, drills, grinders, air chisels and hydraulic presses ♦ Using engineering machinery such as pillar drills, centre lathes, milling machines and welding equipment ♦ Working with various metals, including wrought iron, steel, brass, bronze and copper ♦ Heating metal to the right temperature so that it can be shaped ♦ Joining metals together using various blacksmithing methods ♦ Applying 'finishings' to metal or products.	Industrial blacksmiths are usually employed in mining sites and engineering sites. There are also opportunities in shipbuilding and repair. As an experienced industrial blacksmith, you could also look for work opportunities in the metal fabrication or welding trades. Most of artistic blacksmiths are self employed.

SCHOOL OF ENGINEERING

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Pattern Makers	Pattern makers use hand and machine tools to create full-size models for the moulds used in manufacturing. They work from 2D and 3D engineering drawings and make patterns in wood, resin, metal and wax.	**As a foundry patternmaker, you will need:** ♦ The ability to work to a high level of accuracy ♦ Excellent practical skills ♦ A steady hand for delicate work ♦ The ability to follow 2D and 3D engineering plans and drawings ♦ An understanding of casting processes and properties of metals ♦ Good communication skills ♦ Strong maths skills ♦ Good team-working skills ♦ A methodical approach to work ♦ An awareness of health and safety.	Foundry patternmakers produce full size, three-dimensional models, which are used to create moulds for casting metal in foundries. They can make the models with a range of materials, such as wood, metal, plastic and wax. As a foundry patternmaker, your duties would include: ♦ Planning the best way to make patterns from 2D and 3D drawings ♦ Creating a prototype pattern using hand tools and computer-controlled machinery ♦ Making a sample casting, using the prototype to check it meets customer requirements, changing the pattern to remove any defects ♦ Producing a finished pattern ready for the foundry moulders to make castings. You would also work out and set tolerance levels to take account of molten metal shrinking as it cools during the casting process. Patternmakers can also use modern technology methods to make moulds such as Wire EDM (electrical discharge machining), which is controlled by a computer.	You may have an advantage when looking for work if you have experience of using computer aided design packages or computer numerically controlled machines. If you have both hand and machine tool skills it may increase your chances of getting work. With experience, you could be promoted to foundry workshop supervisor or manager. You could also train to become a technician, which could lead to a career in cast metals technology or mechanical engineering.
Moulder	As a foundry moulder you would make the moulds used to produce castings and parts for industries like aerospace and car manufacturing. You would work with a variety of materials from sand and resin to metals.	**As a foundry moulder, you will need:** ♦ Good practical skills the ability to visualise moulds from two-dimensional plans ♦ A methodical approach to work ♦ The ability to work with a high degree of accuracy ♦ An understanding of casting principles And the properties of metals ♦ Good communication skills ♦ The ability to work on your own and as part of a team ♦ An awareness of health and safety.	As a foundry moulder you would make moulds to shape molten metal into castings. The castings would then be used to make parts for use in industries like aerospace, marine and automotive engineering. You would use different methods to make moulds, including: ♦ Mixing sand with clay and water to make sand moulds ♦ Resin shell moulding - injecting resin into sand and heating it to form a hard shell ♦ Investment or lost wax casting - making a wax replica of the casting ♦ Exposed polystyrene casting - pouring molten metal into a polystyrene pattern ♦ Die casting - making moulds from heat resistant metals ♦ Ceramic mould casting - bonding silica gel with ceramic powders to produce castings. You might also make cores for moulds (coremaking), which create a hollow space inside the casting when the molten metal is poured in. For some jobs, you may have to work with a team of moulders to make larger moulds, and you might make very large moulds using specially designed sand pits in the foundry floor.	You can find opportunities in traditional industrial industries. With experience, you could become a foundry workshop supervisor or manager. You could also train to become a technician, leading to a career in cast metals technology or mechanical engineering.

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Wagon Fitter	Wagon fitters are commonly found in the railway industry, they are responsible for the building, maintaining, servicing and repairing of locomotives, coaches and wagons. They further re-furbish, including accident repairs, heavy overhauls, conversions and upgrades.	**As a wagon fitter you will need:** ♦ Good practical skills and some mechanical knowledge ♦ An understanding of the properties of wood ♦ The ability to follow detailed instructions ♦ Good levels of concentration and attention to detail ♦ A safety-conscious approach to work ♦ The ability to work both on your own and in a team ♦ Good maths skills to make calculations and take measurements.	Wagon fitters are commonly found in the railway industry and they build, maintain, service and repair locomotives, coaches and wagons	Typically, you will progress from an entry level position such as an apprentice, through to more senior roles in your area of specialisation such as a supervisor or technical specialist. Once in the rail industry, you will need to complete additional studies which will depend on operational and state requirements, to progress. You may have the opportunity to study to become a professional engineer.
Electrical Fitter	Electrical Fitters repair compressors-exhausters, main alternators, main generators and traction motors are overhauled. There is also electrical small parts and mechanical small parts in the centre bay were several components are overhauled and tested by Electrical Fitters. Modern-age electronics necessitate electronic training for Electrical Fitters to enable them to repair sophisticated locomotives.	**As a electrical fitter you will need:** ♦ Computer skills excellent mechanical and electrical skills ♦ Good problem-solving skills The ability to work alone and as part of a team ♦ Good communication skills ♦ English and maths skills to work with technical drawings and write reports ♦ A knowledge of safe working practices ♦ An understanding of industry quality standards ♦ A good level of fitness ♦ A willingness to work flexibly to cover shifts and unsocial hours.	**Electrical Fitters repars and test the following on a locomotive:** ♦ Alternators/Generators ♦ Pantographs and roof equipment ♦ Compressors; Knorr & Westinghouse ♦ Bogies and underframe ♦ Brake System ♦ Motors ♦ Batteries ♦ Low voltage equipment ♦ High voltage equipment ♦ Contactors ♦ Relays ♦ Switches electro pneumatic ♦ Protection equipment ♦ Electronic equipment ♦ Transformers and cooling systems ♦ Inductive divert shunts **Electrical Fitter also performs the following duties:** ♦ Panel wiring and machine electrical fitting ♦ Work from electrical drawings.	Your promotion options could include supervisory and management roles. You may also have the chance to specialise in a particular area of the job, such as computer aided design. With further training, you could eventually qualify as a mechanical engineer.The demand for fitters is largely dependent on levels of activity in the manufacturing, mining, transport, construction, electricity, gas and water sectors, and on advances in technology and concerns about security.
Diesel Electrical Fitter	Diesel Electrical Fitters work in a back shop where major repairs are carried out on locomotives. Some are in the repair shops where compressors-exhausters, main alternators, main generators and traction motors are overhauled. There is also a fuel shop, brake shop, electrical small parts and mechanical small parts in the centre bay were several components are overhauled and tested by Diesel Electrical Fitters. Locomotives are periodically serviced, and this is done in the shed (platforms). In this shed work is done under high-voltage conditions and dangerous rotating equipment. Modern-age electronics necessitate electronic training for Diesel-Electrical Fitters to enable them to repair sophisticated locomotives.	**As a diesel electrical fitter you wil need:** ♦ Computer skills excellent mechanical and electrical skills ♦ Good problem-solving skills ♦ The ability to work alone and as part of a team ♦ Experience in build of diesel engine / electric motor driven pump units ♦ Knowledge of High pressure pumps and diesel systems ♦ Good communication skills ♦ English and maths skills to work with technical drawings and write reports ♦ A knowledge of safe working practices ♦ An understanding of industry quality standards ♦ A good level of fitness ♦ A willingness to work flexibly to cover shifts and unsocial hours.	**Diesel electrical fitters examine, repair and test the following on a locomotive:** ♦ Batteries ♦ Alternators ♦ Generators ♦ Motors ♦ Electronic Modules ♦ Contactors ♦ Relays ♦ Low voltage circuits (control circuits) ♦ High voltage circuits (Power circuits) ♦ Brake System (Pneumatic system) ♦ Bogies ♦ Diesel Engine ♦ Turbocharger ♦ Fuel system ♦ Water system ♦ Oil system ♦ Cooling system ♦ Governor (Electro Hydraulic) ♦ Electronic Equipment ♦ Protection Equipment	Your promotion options could include supervisory and management roles. You may also have the chance to specialise in a particular area of the job, such as computer aided design. With further training, you could eventually qualify as a mechanical engineer. The demand for fitters is largely dependent on levels of activity in the manufacturing, mining, transport, construction, electricity, gas and water sectors, and on advances in technology and concerns about security.

SCHOOL OF ENGINEERING

TRADE	TRADE OVERVIEW	SKILLS, INTERESTS AND QUALITIES	APPLICATION	CAREER PATH
Vehicle Builder	This trade is an combination of four trades which include sheet metal work, plumbing, wood work & welding. Vehicle builders do repairs, refurbishing, upgrades and manufacturing of suburban electric train sets and mainline coaches. Vehicle builders need to have a sound understanding of mechanical engineering and good literacy skills so they can read and interpret an engineer's drawings. They also require a sound understanding of the metals and other materials used in the vehicle building process. Manual dexterity and an eye for detail are also important employment-related qualities to have. The work environment in this occupation can be summed up as noisy. Vehicle builders work in noisy workshops, using potentially dangerous equipment such as guillotines and torching devices, so they need to get used to wearing protective clothing and equipment, such as ear muffs.	**As a vehicle builder you will need:** ♦ Good practical skills and some mechanical knowledge ♦ An understanding of the properties of wood ♦ The ability to follow detailed instructions ♦ Good levels of concentration and attention to detail ♦ A safety-conscious approach to work ♦ The ability to work both on your own and in a team ♦ Good maths skills to make calculations and take measurements.	Vehicle builders set up bearers to support the floor of the vehicle. Then they put in the side frames, the roof, and the front and rear ends. Skinning, or the roof and side panelling, is then inserted before the coach is painted and the fit-out of chairs is then done. Vehicle builders use materials such as steel, wood, plastic or aluminium to construct or modify a commercially built vehicle. Panels, made out of these materials are used to cover the chassis, but first they have to be outlined on the particular material and then cut out, using equipment such as a guillotine or oxy acetylene equipment. They then weld, glue, bolt and rivet these materials together, and onto the chassis. Finally, they fit the suspension and braking systems, hydraulic and pneumatic systems, lighting and electrical systems, as well as the brakes, door handles, seats, locks and hinges.	Vehicle builders are mostly employed by transport equipment companies, including bus and rail transport. Some are also self-employed. Vehicle builders develop a range of skills and as such, it is possible for them to move into other trade areas such as metal fabrication or welding. With experience and further training, they can also move into supervisory positions or work as technical officers or technicians, or in sales. This is a fairly small occupation which can limit job prospects. However, the skills of vehicle builders can be transferred to other occupations like metal fabrication, hydraulics, mechanical fitting, sheet metal work or finishing.
Armature Winder	The armature winding is the main current-carrying winding in which the electromotive force or counter-emf of rotation is induced. The current in the armature winding is known as the armature current. The location of the winding depends upon the type of machine. The armature windings of dc motors are located on the rotor, since they must operate in union with the commutator. In DC rotating machines other than brushless DC machines, it is usually rotating. Armature Winders locate and repair or replace the broken parts of electric motors, or where the coils are burnt out or damaged, and repair or replace them, or completely rewind all the coils. Armature winders use various kinds of testing instruments to locate damaged coils. Once found, a decision has to be made whether to repair the damaged coil or to completely rewind the machine.	**As an armature winder you will need:** ♦ Good practical skills ♦ An ability to follow technical drawings, building plans and wiring diagrams ♦ An ability to work carefully, methodically and safely ♦ A head for heights and willingness to work in all sorts of weather ♦ A willingness to work in confined spaces ♦ Good written and spoken communication skills ♦ An ability to work in a team as well as on your own ♦ A flexible approach ♦ Good problem-solving skills.	Armature winders work from diagrams that give details of the arrangement of coils, the number of turns required for each, etc. Sometimes they have to draw the diagrams themselves. Every coil is thoroughly checked and recorded in detail. To wind coils with the correct number of turns and shape, coil-winding machines are used. The coils are then checked and fitted into the slots of motors and generators connecting them according to specified circuit requirements. Some of the duties of an armature winder are: ♦ Examine and test wired electrical components such as motors, armatures, and stators, using measuring devices and record test results ♦ Operate or tend wire-coiling machines to wind wire coils used in electrical components such as resistors and transformers, and in electrical equipment and instruments such as bobbins and generators ♦ Cut, strip, and bend wire leads at ends of coils, using pliers and wire scrapers.	Typically, you will progress from an entry level position such as an apprentice, through to more senior roles in your area of specialisation such as a supervisor or technical specialist. Once in the rail industry, you will need to complete additional studies which will depend on operational and state requirements, to progress. You may have the opportunity to study to become a professional engineer. Armature winders are employed in the following industries: ♦ Steel and engineering ♦ The electricity supply ♦ Motor vehicle manufacturing ♦ Motor vehicle repair ♦ Independent armature winding. Wind wire coils used in electrical components, such as resistors and transformers, and in electrical equipment and instruments, such as field cores, bobbins, armature cores, electrical motors, generators, and control equipment.

BURSARIES

We offer bursaries for full-time study towards degrees in Industrial, Electrical, Electronic, Mechanical, Metallurgy, Computer, Civil, and Electro-mechanical Engineering as well as in Quantity Surveying and Environmental Management. These bursaries include full tuition and identified related costs with the opportunity of job placement on the successful completion of studies. This placement also serves as a pay-back period.

In addition, we provide students with vacation work as required by their fields of study.

Vacation Programme:
Workplace Experience. Placement is dependent on the needs of individual departments as well as those of the students. The minimum requirement for placement is the completion of theoretical component S4.

What are the requirements?

- Be Grade 12 learners with outstanding achievements
- Be South African citizens
- Be medically fit
- Mathematics and Physical Science, with a minimum five symbol

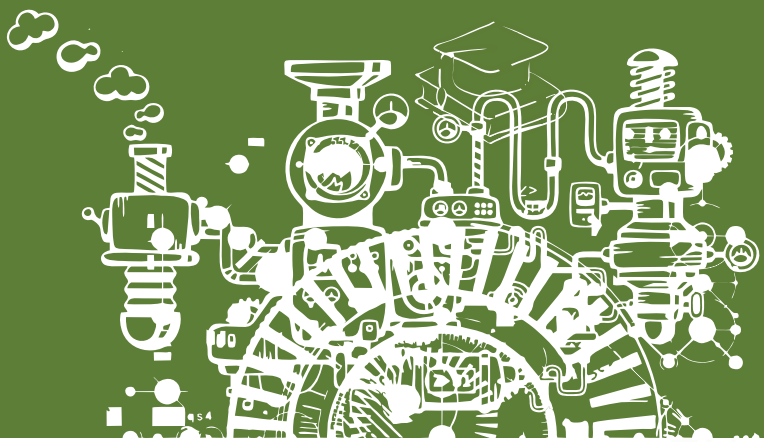
How do I apply?

If you are a Grade 12 or tertiary institution student, you can apply for a bursary online.

Applications open in May and close on 31 July every year. We select and screen students on academic performance, and bursary allocations are made in line with Transnet Employment Equity targets as well as the company's technical skills strategy.

For further information or to download an application form, go to: **www.transnet.net** Click on "careers" and select "bursaries".

Email your application, CV and proof of academic results to: bursaries@transnet.net or fax them to 011 774 9235



PROGRAMMES FOR GRADUATES

YOUNG PROFESSIONAL-IN-TRAINING

The purpose of the Young Professional-in-Training (YPT) programme is to develop individuals who have completed technical and non-technical tertiary qualifications, by providing relevant work experience, leading them to become competent professionals within Transnet. YPT is a 24 month structured programme which individuals are assessed at regular intervals.

The programme affords young professionals work exposure in disciplines such as supply chain and logistics, procurement, human resources, corporate & public affairs and finance. Intake is dependent on the needs of individual departments.

HOW WE SOURCE YOUNG PROFESSIONALS

We source Young Professionals-in-Training from universities and universities of technology, either on direct visits to the campuses or by advertising through appropriate channels.

We also identify students

- Who have successfully completed their bursary phase on the Transnet Bursary Scheme
- In their final year of a relevant degree at universities or universities of technology, on condition that they successfully complete the qualification
- Via relevant youth development agencies and recruitment agencies.

In addition, internal Transnet employees who have completed a degree or diploma with a Transnet bursary are better placed in different roles or functions within the organisation.

How can I join the YPT programme?

If you have completed a commercial or social science degree or diploma at a university or university of technology, you are eligible for a two-year structured YPT programme.

How do I apply?

If you have a national diploma or degree in an identified discipline, and are interested in joining our YPT Programme, look out for advertising in newspapers and Transnet careers portal on **www.transnet.net** or call us on **012 743 2389**.

ENGINEER -IN-TRAINING

WHAT WE DO

The Engineer-in-Training programme (EIT) provides experiential learning for graduates with a degree in Engineering, to assist them in gaining sufficient experience to be deployed within Transnet.

The programme consists of defined segments – formal, theoretical and on-the-job – which are necessary to meet the training needs of the graduates. The training lasts for 24 months. It is divided into four-six months evaluation period.

The programme includes:

- **Formal training** courses are provided in management, supervision and technical knowledge and skills. As a rule, we offer these formal courses internally, where necessary, however, courses may also be offered to external organisations.

- **On-the-job training** takes place in the work environment under the guidance of mentors and supervisors. It comprises explanation of and guidance in the practical application of knowledge, skills and techniques in the various fields of activities which are needed to carry out tasks and job instructions.

What do I need to join EIT?

A Bachelor's Degree in Engineering from a recognised university and in a field relevant to Transnet. No experience is required, although it may be taken into account when you are placed in the applicable structured development programme time frame as decided by the mentor committee.

How do I apply?

Full-time bursary recipients who have successfully completed their degree and have been employed by Transnet, automatically qualify for the programme, and do not need to apply. The programme starts on the date of your employment, and lasts for 24 months.

TECHNICIAN IN-TRAINING

WHAT WE DO

The Technician-in-Training programme (TIT) provides experiential learning for learners, or students with a diploma in Engineering, to assist them in gaining sufficient experience to be deployed within Transnet.

The programme consists of defined segments – formal, theoretical and on-the-job-training which are necessary to meet the training needs of TIT. The training lasts for 18 months, divided into three-six month evaluation period.

The programme includes:

- **Formal training** in management, supervision and technical knowledge and skills. As a rule, formal courses are offered by Transnet internally; however, where necessary, courses may also be offered to external organisations.
- **On-the-job training** which takes place in the work environment under the guidance of mentors and supervisors. It comprises explanation of and guidance in the practical application of knowledge, skills and techniques in the various fields of activities which are needed to carry out tasks and job instructions entrusted to TIT.

What do I need to join TIT?

A diploma in engineering from a recognised university of technology in a field relevant to Transnet.
No experience is required, although it may be taken into account when you are placed in the applicable Structured Development Programme time-frame as decided by the mentor committee.

How do I apply?

Bursary recipients who have successfully completed a diploma and have been employed by Transnet, are automatically absorbed into the programme, and do not need to apply. The programme starts on the date of your employment, and lasts for 18 months.

CHARTERED ACCOUNTANTS TRAINING

WHAT WE DO

Developing essential skills

In South Africa there is a shortage of accountants – especially black and women accountants and the Chartered Accountants Training (CAT) Programme has been designed as a strategic intervention to train prospective Chartered Accountants to meet the skills requirements not only for Transnet, but for South Africa as a whole. Transnet has been an accredited training office with the South African Institute of Chartered Accountants (SAICA) since 1997.

What does the CAT programme involve?

The CAT programme is a three-year learnership programme for candidates who have a Certificate in Theory of Accounting (CTA)/BCompt (Hons) or equivalent. SAICA'S stringent requirements demand that trainees receive extensive training in Financial Management, Management Decision-making, Financial Accounting, Internal Audit and Corporate Governance, Auditing and Assurance, and Taxation. The training also includes the development of professional attributes such as interpersonal, intellectual and communication skills, as well as those in the areas of personal, and organisational and management.

Rotation for a broad experience

Trainees are rotated between the head office and the company's operating divisions. The rotation is tailored to meet the needs of the trainees as well as those of the respective operating divisions. Trainees spend at least one-third of their practical training in one division. The training programme matches the depth of the SAICA syllabus requirements and provides a wide business exposure.

What can I expect?

At Transnet we offer our trainees industry-level support to ensure their success in the programme.

The programme includes:

- Study leave for the board exams
- Supplementary courses
- General business management training
- Exam technique courses, revision courses for the board exams
- Competency assessments

All trainees are assigned a mentor from among the Chartered Accountants within Transnet. Our mentors volunteer their time, passion and dedication to the success of the programme and the trainee accountants, and provide leadership, empowerment, guidance and advice.

What do I need to join CAT?

If you are registered in the final year of the CTA registration you can join the programme. Current CTA students are also welcome to apply.

How do I apply?

If you would like to join the CAT programme, please forward your Curriculum Vitae (CV), including copies of your Grade 12 certificate, academic record, proof of your final-year CTA registration and a copy of your ID.

You will need to email these documents to catraining@transnet.net
Please remember that the closing date for applications is 31 August of each year.

The Maritime School of Excellence is a distinguished training enterprise in South Africa where all the necessary maritime training takes place and all the essential skills are taught, to enable our learners to join the growing pool of quality human resources for the international maritime and port sector.

MARITIME SCHOOL OF EXCELLENCE

Preparing people for future roles

The Maritime School of Excellence was established specifically to provide the necessary skills for Transnet Port Terminals and Transnet National Ports Authority. In preparing learners for important roles in Southern African ports, the Maritime School of Excellence enables them to make an essential contribution in the efficient economic performance not only of the company, but of commerce, industry, and South Africa as a whole, as well as the entire Southern African region.

A history of excellence. A future of success.

The school has been successfully offering certification in marine careers since 1991, helping to fulfil the dreams of thousands of students. With over 40 courses and ample lecture rooms that can accommodate up to 6000 students per year, there is certainly a place for you.

> *Transnet's objective is to establish the Maritime School of Excellence as a leading African training provider in marine operations, terminal operations, port management and port engineering, as well as a supplier of high-quality seafarers to the market.*

Cutting-edge teaching

When you join the Maritime School of Excellence, you are in the hands of experienced mentors and training staff such as harbour masters, marine pilots, tug masters , marine engineers, and terminal operators. Receive practical training through advanced training aids and state-of-the-art full-mission simulators as you learn how to manoeuvre ships, tugboats and operate terminal-related equipment and machinery.

A philosophy of service and partnership

While Transnet's internal demands for skills have increased over recent years, the school is also respected among customers and academic institutions for external training, as well as research and development services to the broader maritime industry.

The vast experience and expertise that we have accumulated at the Maritime School of Excellence over the years within the maritime industry, enables us to facilitate knowledge transfer in port-related training and business solutions specific to customers' needs.

Our philosophy is to develop a partnership with our customers. This approach serves as a platform for expert advice on the best offerings, including tailor-made learning options to match our clients' business requirements. Strategic partnerships with other training providers, technical suppliers and technology specialists reinforce our capacity to deliver comprehensive business solutions.

The Maritime School of Excellence has attracted the attention of marine entities seeking training interventions from across the continent, including Mozambique, Tanzania, Kenya, Namibia, Cameroon, Uganda, Sudan, Zambia and Nigeria.

MARITIME SCHOOL OF EXCELLENCE

WHERE WE ARE

The school is strategically located in Africa's largest port City of Durban, with satellite campuses in Richards Bay, Cape Town and Port Elizabeth.

The school is carving out a position as a premier marine training institution, including qualifications in marine pilot, tug master training, skipper port operations, motorman grade II and operator lifting equipment courses.

Accreditation and partnering for excellence

At the Maritime School of Excellence we ensure that all our service offerings remain on par with international best practice by offering globally competitive and accredited training courses by the South African Maritime Safety and Authority (SAMSA) and Transport Education and Training Authority (TETA). While our qualifications and courses are already nationally and internationally aligned, we are engaged in further alignment with internationally recognised and accreditation bodies on an ongoing basis. We are also continuously undertaking research and development alongside benchmarking exercises with other maritime organisations around the world.

We work closely with a variety of partners and fellow associations; both local and international.

TRAINING FOR A NEW LIFE

If you have ever thought of a productive, interesting and challenging career in engineering or marine disciplines, then Transnet is the place for you.

Here, at the Maritime School of Excellence, you can obtain education and training that will unleash a world of opportunities.

If you have a desire to learn, we will assist you to grow in excellence, attain skills and equip you with the tools to assist in problem-solving.

Transnet regards the development of technical skills to be key in the growth of individual learning and the filtering of those skills back into the South African market, this is key to South Africa's success in totality. We regard motivated young people as central to the effectiveness of the service we provide.

Technology for the opportunity of a lifetime

During the various training courses, learners experience the full-mission ship-handling simulator installed at the Maritime School of Excellence satellite campus in Bayhead, Durban. It is used to train marine pilots and tug masters, bringing them up to par with the International Standards of Training, Certification and Watchkeeping requirements and refining their skills with refresher training.

The Maritime School of Excellence has terminal operations simulators, rubber tyred gantry cranes, container straddle carrier as well as the ship-to-shore container cranes – all providing learners with real-time ability to operate, manoeuvre and familiarise themselves on all terminal-related equipment and machinery.

In addition, we make use of reach stackers, counter-balance lift truck, mobile harbour cranes, rail-mounted gantries and straddle carriers to add to the select training provided by the Maritime School of excellence.

The learning and employment opportunities that the Maritime School of Excellence creates are not only for Transnet but also for the maritime industry and South Africa.

LEARNERSHIPS THAT WE OFFER

Operator – Lifting Equipment

As a Lifting Equipment Operator, you will be focusing on supporting port and terminal operations.

To enrol for this course you will need:

- Only Grade 12 (matric)
- A Code 8/EB driver's licence valid for at least three years
- Computer literacy
- To be physically fit and healthy
- To be prepared to work shifts and in adverse weather conditions
- To be functionally literate and
- To pass a pre-entry examination and a medical examination, which will include an assessment of hand-eye coordination, depth perception and the ability to work at heights.

Skipper Port Operations

As a Skipper Port Operator, you'll be in charge of vessels of over 25 tons, but less than 200 tons, in a port operations area.

To enrol for this course you will need:

- Grade 12 (matric) with mathematics and physical science
- To pass a pre-entry examination and a medical examination and
- To be physically fit and healthy.

Marine Motorman Grade II

As a Marine Motorman, you will undertake maintenance, repairs and servicing of engines and auxiliaries on board a vessel in a port operations area, under the supervision of the Chief Engineer.

MARITIME SCHOOL OF EXCELLENCE

To enrol for this course you will need:

- Grade 12 (matric) with a 60% pass in mathematics and physical science;
- To pass a pre-entry examination and a medical examination; and
- To be physically fit and healthy

Can I join the Maritime School of Excellence?

If you are motivated, able to rise to challenges, and are interested in a long-term maritime career, then you can apply to join the Maritime School of Excellence. If you require further information, we can provide you with a brochure detailing the available courses and relevant entry requirements.

What do I need?

Minimum requirements vary with each course, however you will need a Grade 12 Level 4 compulsory subjects of English, Mathematics and Physical Science for Marine related courses.

How do I apply?

If you are an external candidate, and wish to apply for those courses that are open to the private sector, you will need to contact the Learner Administration Department at the Maritime school of Excellence in order to enrol in the course of your choice.

Please note that recruitment starts in October - each year, and you should apply when you see an advertisement in your local or national newspapers and Transnet career's site on **www.transnet.net**. You will then need to submit the following documents to the relevant Human Resources manager:

· An application le er
· Matric Certificate
· Curriculum Vitae (CV)
· Any supporting documentation i.e driver's licence.

How to reach us

For more information on the Maritime School of Excellence and an exciting fulltime maritime career, email enquiries to **MSOE@transnet.net**
Tel: **(031) 361 2397**


44 015


ALSTOM
LINE
BOGIES
ON 0
NEU
ALSTOM
MainAir
334kPa
BCyl B2
0kPa
0 km/h
OFF S
NEU


BROMMA
BROMMA

Notes

Please Note: Transnet, its employees or representatives never ask for a fee from job seekers. Any such requests are fraudulent. Please report any suspicious activities in this regard to the Transnet anti-fraud line on 0800 003 056