



PROSPECTUS AND PROFILE

2018

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1 INFORMATION FOR STUDENTS AND PUBLIC

1.1 Directors and Management

Managing director: Nicolaas Christiaan du Plessis

Director: Elizabeth du Plessis

Training manager: Pieter Prinsloo

Training and development manager: Paul Sloane

Senior manager: Paul van Eeden (Trade test and building automation)

1.2 Academic staff

Full time academic staff

Nick du Plessis	Master Installation Electrician, Moderator, Assessor, National certificate occupationally directed education, training and development practices
Pieter Prinsloo	Installation Electrician, Moderator, Assessor
Paul Sloane	Installation Electrician, Assessor
Paul van Eeden	Electrician, Assessor
Lesiba Ledwaba	Electrician, Instrument Mechanician, Assessor
Zacheus Boekhouer	Fitter and Turner, Assessor

Contracted academic staff

Mel Wilmans	Government ticketed Engineer. Master Installation Electrician, Assessor
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1.3 Quality Policy, Values & Beliefs

We will meet or exceed our customer's expectations by continuously improving our processes and services.

Our values

At P & T Technology (Pty) Ltd, the following core values are expected from all our team at all times. These values are to be expressed in our day to day actions and decisions, and our interactions with others.

Respect

- We respect people and their opinions
- We respect differences and skill diversity
- We recognise that all people have valuable contributions to make

Integrity

- We communicate and act in an open, honest, ethical and transparent manner
- We aim to meet our promises
- We are trustworthy – we mean what we say
- We make decisions on merits, based on facts, logic and process

Team Work

- We create an effective and supportive team environment,
- We use and foster creativity and innovation

Commitment and Responsiveness

- We demonstrate motivation and commitment to our role
- We are committed to being responsive to the needs of internal and external stakeholders
- We aim to be timely and efficient

Flexibility and Innovation

- We are open to changes that may help achieve our goals
- We encourage innovation and ideas

Partnership

- We work in partnership with business and industry professionals, learners, students, and other providers.

Accountability

- We take responsibility for our actions and decisions
- We demonstrate leadership

Excellence

- We strive for quality and excellence in our actions every day.
- We are committed to high performance and professionalism.

Customer and quality policy

- We meet or exceed our customer expectations by continuously improving our processes and services.

1.4 Vision

P & T Technology (Pty) Ltd will remain an Institution of Occupational Excellence and be a nationally recognized leader of training, development and assessment center in the Electrical, Instrumentation, Fitting and Millwright industry by 2021

1.5 Mission

P & T Technology (Pty) Ltd.'s mission is to provide applied tertiary education to empower people to succeed in workplace roles in professions, para-professions, trades and technicians roles – for both entry level and development. We undertake applied research that benefits industries and professions and provide our communities with knowledge and skills to assist social and economic development

1.6 Admission requirements and procedures

Admission or entry requirements are as stipulated in the relevant qualification.

1.7 Language of tuition

All tuition and training manuals will be in English.

1.8 Mode of instruction

Apprenticeships and learnerships

Learners attending the apprenticeship and learnership programs will have classroom instruction, self-directed learning and workshop instruction during the training program

Short courses

The nature of the course will determine the mode of instruction.

1.9 Accreditation

All of P and T Technology (Pty) Ltd qualification and unit standard programs are accredited by the relevant accreditation bodies.

1.10 Qualification rules

Qualification and assessment specifications are defined in the qualification or program and are moderated internally by our moderator and externally by the Education Training and Quality assurance department of the accreditation authority.

1.11 Fees

As per terms and conditions of the program. Total costs include 15% VAT

1.12 Financial aid

P and T Technology (Pty) Ltd do not supply financial aid to students. We advise them to approach NSFAS

1.13 Student support services

We have an administration department that provide student support services

1.14 Code of conduct

All learners need to adhere to the code of conduct.

2 INTRODUCTION

P & T Technology (Pty) Ltd commenced business in 2002. The company's main function was development of training material and training assessors and coaches. The electrical training part of the business started in 2005 at premises at the Rand Airport in Germiston, Gauteng, South Africa. We moved to our present premises in Wadeville in September 2007. Our focus is to develop Electrical Competency at our Training Institute within a realistic electrical simulation environment catering for the domestic, industrial, commercial and hazardous electrical industries.

In August 2016 P & T Technology (Pty) Ltd obtained accreditation for Instrumentation Mechanician, Millwright and Mechanical Fitter. Currently we are only training Learnerships and apprenticeships in these fields.

The company has accreditation as a training provider with the Education Training and Development Sector Education Training Authority (ETDP SETA), and electrical training and assessments with for learnerships and apprenticeships with Energy Water Sector Education Training Authority (EWSETA) Construction SETA (CETA), Manufacturing SETA (MERSETA) as well as the Chemical Industries SETA. It furthermore has accreditation as a Decentralised Trade Test Centre, with the EWSETA, CETA and CHIETA and has already been accredited by National Artisan Moderation Body (NAMB) and INDLELA. In order to support continued safety and standards, P & T Technology trains individuals to coach learners in the workplace as well as to plan and conduct assessments of learning, Moderation and Train the Trainer

The core of the Electrical part of the business is to develop the skills of the electrical person responsible for the compliance, safety declaration and certification of the electrical installation. Our courses provide the skills and knowledge required by the electrician in order to inspect and test an electrical installation. Our inspection and testing programmes currently cater for three levels, Domestic (single phase tester), Industrial/Commercial (three phase) and Hazardous

(flammable areas). All of these courses lead to a competence assessment where the learner will have to demonstrate knowledge and skills in a practical assessment on site.

We have accreditation to facilitate National Qualifications Framework 2, 3 and 4 electrical learnerships and apprenticeships as well as Recognition of Prior Learning (RPL) assessments on the same levels. All levels of unit standard assessment and Single Phase competence evaluation and unit standards as required by the Department of Labour in order for applicants to apply to for registration as an accredited person

Programmes have been developed for the non-electrical manager who, in the nature of his work, is required to ensure the safe use and maintenance of electrical installations.

Our commitment in the electrical industry has led to us working with project co-ordinator from The Chamber for Skilled Crafts and the Chamber for Industry and Commerce in Nuremberg, Germany; Gauteng Department of Education; Energy SETA; Ekurhuleni West College, and various other stakeholders in industry in the first electrical learnership embarked on in South Africa. The role of P & T Technology was to facilitate the assessment principals and practices applied.

P & T Technology firmly believe that there is a skills shortage in the electrical environment. We have embarked on a joint venture with the Peermont Education Trust.

We have supported industry initiatives in the electrical sector, participating in curricular and qualifications development for electrical and domestic appliance repair. P & T Technology's MD was instrumental in piloting the Approved Electrical Inspection Authorities (AIA) with the Department of Labour. It was the involvement in the AIA that prompted us to develop the Competency Training Institute in support of the South African Government's drive for the electrification for all.

3 ELECTRICAL TRAINING

P & T Technology (Pty) Ltd is an Electrical training and Trade test centre.

3.1 Short courses

The short courses that we offer are for the unit standards as required by the Department of labour for the application of registered persons. We are accredited by the EWSETA to provide this training

3.2 Installation rules

We offer part time classes for Installation rules but are not a registered exam centre to administer the exam.

3.3 Foreign qualification practical evaluation (as per ohs 3/1/5/7/9)

We offer a Foreign Practical Evaluation, in order to verify foreign qualifications electrical practical competence as required for application to Department of Labour for registration as a registered person.

3.4 Skills programs

The skills program that we offer is: Safety in the workplace – Hand tools and power tools

We also develop industry specific short courses based on unit standards of in-house needs

3.5 Apprenticeship and Learnership training

We are accredited by QCTO, CETA (Construction SETA), CHIETA (Chemical Industries SETA) and EWSETA (Energy and Water SETA) for our learnership training programs National certificate electrical engineering NQF 2-4 as well as apprenticeship

We are accredited by the CHIETA and QCTO for apprenticeship training.

From 2018 we will no longer be enrolling new learners onto learnership training as the NQF system is being phased out.

3.6 Trade test

Our Electrical trade test centre is accredited by QCTO, NAMB (National Artisan Moderation Board), INDLELA, CHIETA, CETA and EWSETA.

Applications for trade test can be submitted to our office together with your proof of payment for the application. The documents will be sent to the relevant SETA for approval. Once approval is received a Trade test date will be allocated. The applicant will receive a notification letter from P & T Technology notifying them of their trade test date once approval is received from the relevant SETA.

3.7 Pre trade test evaluation and training

P & T Technology (Pty) Ltd offer following training for the candidate who wishes to partake in the Trade test pre trade test training.

Trade test evaluation is used to determine if the candidate has any gaps in their knowledge and skills against the curricular of an electrical artisan in order to write trade test.

Gap closure training must be conducted prior to the trade test in order close the identified gaps in knowledge or skills. **Brush up training** can be undertaken before partaking in the trade test. This will provide the candidate with the best opportunity to pass the National Trade Test.

3.8 Single phase tester criteria

We offer programs for the delegate who has no formal training but wished to become a single phase tester. The following programmes are offered

- Single phase assessment program and assessment
- Single phase Assessment only
- Single phase knowledge test

4 MECHANICAL FITTER, INSTRUMENT MECHANICIAN & MILLWRIGHT TRAINING

We are accredited by QCTO and the CHIETA for learnership and apprenticeship training for Mechanical fitter and Instrument Mechanician and apprenticeship training for Millwright.

From 2018 we will no longer be enrolling new learners onto learnership training as the NQF system is being phased out.

4.1 Trade test

P & T Technology is not currently an accredited trade test centre for Mechanical fitter, Instrumentation Mechanician or millwright.

We are however able to assist with the trade test preparation training and book the Trade test evaluation and trade test for you at an accredited trade test centre.

5 RPL

RPL assessments are conducted against the requested program, qualification, trade or skill set

6 SPECIAL REQUESTS

Specific programs can be developed for industry, if the unit standards are not in our accreditation scope and we have the relevant skills and knowledge we can request extension of scope in order to address our clients' needs.

7 TRAINING BOOKINGS

Short course and skills program bookings are made by means of completing an enrolment form for the relevant course. Once we receive the enrolment form a Quote or Pro forma Invoice will be generated indicating the course booked, date and time of the course, delegate' attending the course. If the company is paying we will require a copy of the purchase order for the course booking.

All course costs need to be paid before the course takes place. Delegates will not be allowed to attend the course if fees have not been paid or if we have not received the purchase order.

Learnership or apprenticeship bookings are made by completion of the enrolment form from the Employer that they wish to embark on learnership or apprenticeship training. A Service level agreement is then completed between the Employer and P & T technology.

Fees for learnerships or apprenticeship need to be paid as per written agreement with the employer and P & T technology.

7.1 Tuition fees

Duration of courses varies significantly and it is commonplace for training intuitions to charge on a week basis. The duration of each course is calculated to include public holidays and therefore there is no reduction in fees for public holidays.

Fees for short courses and skills programs are payable before training takes place unless we have a contract or a purchase order. Purchase order payments need to be paid within 30 days of the course taking place.

8 ACCOMMODATION, MEALS AND TRANSPORT

8.1 Accommodation

No accommodation is provided by P & T Technology (Pty) Ltd. There are bed and breakfast facilities as well as a Road Lodge in the area

8.2 Meals

Meals are provided only during the training days for our short courses.

No meals will be provided for during training and assessment programs for our other training programmes.

8.3 Transport

No transport will be provided for during training and assessment program. Public transport is available as well as the train station is within walking distance

9 APPRENTICESHIP AND LEARNERSHIP LEARNER REQUIREMENTS

9.1 Learner discipline

All learners while at the training centre will be governed by the P & T Technology code of conduct and procedures.

9.2 Personal protective equipment

Learners are to provide their own overalls, eye protection and safety shoes.

9.3 Tools

Learners are to provide their own tools. Tools provided by the training centre for the learners to use must be returned when the learner has finished using them.

9.4 Safety and security

Safety procedures are explained to learners at the induction.

There is no formal security, but we try to ensure the safety of all on the premises by keeping the gate locked from 8:00am to 4:30 pm. The gate is opened during lunch time and tea times.

All learners are provided with the use of a locker to put their personal items into while at the training centre. They need to provide their own padlock. Learners are required to ensure that they protect their own assets from theft or damage.

Random searches will take place of learner's vehicles, person and bags.

P & T Technology subscribes to an armed response company should there be a need for their services.

9.5 Reports and certificates

While the learners are at the training centre the learner's employer will receive a weekly report of their activities and attendance.

Qualification certificates are issued by the relevant SETA and not the training centre. The Qualification certificates will be issued to employers as soon as they are received from the relevant SETA.

Should legislation, regulations or criteria change out of our control, our courses and assessment process and cost will change accordingly.

9.6 Apprenticeship and Learnership fees

Learnership and apprenticeship fees are payable as per written agreement made at the time of booking the training.

10 TERMS AND CONDITIONS

10.1 Terms and conditions of training – short courses

- P & T Technology has the right to limit students per class Before booking and paying for a program please confirm if a program is fully booked or not.
- Application to be made by means of completing and returning an enrolment form via web page, email or fax.
- Learnership / apprenticeship enrolments to be made via the enrolment form attached to the course document
- We will communicate with you in five working days, if we have not communicated with you in this time please contact our office.
- Once your application is received, a Pro forma invoice is generated and the payment will be due.
- On DIRECT TRANSFERS or DEPOSITS please quote the Pro forma invoice / Invoice number.
- Fax or email proof of payment to 011 827 4118 or liz@pandttechnology.co.za.
- Bookings will only be confirmed when the payment is confirmed and you will only be permitted to attend the course if the payment has been made.
- Payments need to be received 7 working days prior to any course attendance.
- Cancellations of a course within 7 working days of the course will be charged in full.
- Cancellations of assessments for the for whatever reason will be charged in full
- The Testing and Inspecting unit standard assessment is treated as a NATIONAL EXAM and cannot be cancelled.
- All re-assessments and cancelled assessments will be levied at a cost of 45% of the course fee and no negotiations will be entered into.
- Any other Code of practice not mentioned must be purchased separately.
- P and T Technology (Pty) Ltd reserves the right to cancel any program should there be less than 8 persons
- By forwarding the request for training or/and assessment you declare that you have read and understand the course /assessment criteria
- PLEASE NOTE: Should legislation, regulations or criteria change out of our control, our courses and assessment process and cost will change accordingly
- NB: It is your responsibility to ensure that you meet the registration criteria to be registered by the Chief Inspector as an Electrical tester for Single phase, Installation Electrician or Master Installation Electrician as defined in the Electrical Installation regulation.
- P and T Technology (Pty) Ltd cannot be held responsible for any criteria as required by SETA or by any other body for registration, accreditation or the like. You need to ensure you meet the relevant criteria.
- Safety criteria and conditions are to be adhered to at all times and you must ensure you have the relevant PPE and tools where required.
- P and T Technology (Pty) Ltd does not do accommodation bookings and cannot be liable for any issues relating to accommodation.

10.2 Terms and conditions of training for apprenticeships

All training is booked to the following terms and conditions:

- Payment is due before learners attend training.
- All training costs include 15% Vat
- P & T Technology (Pty) Ltd is only responsible for the Provider assessments of the unit standards
- P & T Technology (Pty) Ltd will upload the training and assessment results to the relevant SETA.
- Any fees not paid on time will be charged interest at prime rates.
- PLEASE NOTE: Should legislation, regulations or criteria change out of our control, our courses and assessment process will change accordingly.

10.3 Terms and conditions – fees

- P & T Technology reserves the right to amend fees without giving prior notice during the course of the academic year, candidates booked will not be affected by this in that year
- All fees are payable irrespective of whether the training program is interrupted by factors beyond the training centres control. Full fees are payable in the case of suspension or expulsion resulting from any disciplinary measures.
- Although the information in this guide have been compiled as carefully as possible the training centre accepts no responsibility for errors or omissions.
- All fees must be deposited into the training centres bank account and the proof of payment must be forwarded to our office.
- Delegates or Learners who have outstanding balances will not be permitted to attend scheduled assessments.
- Account statements are emailed monthly. By virtue of signing the enrolment form the learner / delegate accepts the responsibility for payment of all fees by due date. Irrespective of whether an account has been received or not. It is the responsibility of the learner / delegate to inform the training centre of his/her correct email address and to make enquiries regarding the fee account.
- Interest at the prevailing prime bank overdraft rate plus two percent will be charged on all outstanding amounts.

10.4 Terms of Cancellation – non arrival

Cancellations can be extremely disruptive.

- Cancellations of a course within 7 working days of the course will be charged in full.
- Cancellations of assessments for whatever reason will be charged in full

10.5 Terms of payment

Payments may be made by cheque deposited into our bank account or direct deposit.

NO cash is accepted on the premises.

Proof of payment need to be faxed to 011 827 4118 or emailed to liz@pandttechnology.co.za

The banking details are as follows:

Account name:	P and T Technology (Pty) Ltd
Bank	ABSA
Branch	Alberton
Branch code	631-142
Account number	4056618661
VAT number	4290205808

11 QUERIES

Any further queries can be directed to:

Nick du Plessis nick@pandttechnology.co.za

0118274113/6

12 APPRENTICESHIP TRAINING

The apprenticeship learning program for Electrical, Instrument Mechanician, Millwright and Mechanical Fitter will be delivered at our training center based at 141 Lamp Road, Wadeville, Gauteng. Training times are 8:00 to 16:30 Monday to Thursday and 8:00 to 15:00 Fridays. Classes start promptly at 8:00 and late coming will not be tolerated as this disrupts the learning of other learners

12.1 Program duration

The 2018 program will be conducted over a period of ten weeks. The phase assessment will take place during the first week for a learner who did training on a previous level with us and institutionalised training start once the Phase assessment is completed. Phase 1 learners will have ten weeks institutionalised training.

The program will be conducted four (4) times a year. The learners would attend one block (10 weeks) in the year for each level of training only. Training dates will need to be booked in advance.

Millwright apprentices will need to attend two blocks of training per year in order to cover the electrical and fitter components of the trade.

Institutionalised Training dates are as follows:

1 st block	15 January to 23 March 2018
2 nd block	9 April to 15 June 2018
3 rd block	2 July to 7 September 2018
4 th block	1 October to 7 December 2018

13 THE LEARNERSHIP PROGRAM

The learning program for all trades will be delivered at our training center based at 141 Lamp Road, Wadeville, Gauteng. Training times are 8:00 to 16:30 Monday to Thursday and 8:00 to 15:00 Fridays. Classes start promptly at 8:00 and late coming will not be tolerated as this disrupts the learning of other learners

From 2018 we will no longer be enrolling new learners onto learnership training as the NQF system is being phased out.

13.1 Program duration

The 2018 learnership program for Electrical, Instrument Mechanician and Fitter will be conducted over a period of twelve weeks. The summative assessment will take place during the first week for a learner who did Institutionalised training in a previous year or on a previous level with us and institutionalised training will start once the summative assessment is completed. This program will be conducted four (4) times a year

The program will be conducted four (4) times a year. The learners would attend one block (12 weeks) in the year for each level of training only. Training dates will need to be booked in advance.

Institutionalised Training dates are as follows:

1 st block	8 January to 29 March 2018
2 nd block	9 April to 29 June 2018
3 rd block	2 July to 21 September 2018
4 th block	1 October to 14 December 2018

14 APPRENTICESHIP AND LEARNERSHIP TRAINING PROCESS FOLLOWED

The learners follow a set training plan and will be exposed to knowledge as well practical skills. Learning material is computer based and all learners have access to their own learning computer as well as practical equipment in order to develop required skills base.

14.1 Assessments.

Formative assessments are ongoing and will be recorded in each learner's portfolio of evidence files. At the end of the workplace practical training period a summative assessment will be conducted in order to establish competence. The appointed representative of the employer will receive a weekly report on the progress of their learners.

14.2 Facilitator vs learners ratio.

Each program is limited to sixteen (16) earners unless otherwise requested by the employer. The reason this is applied is in order to allow every learner the opportunity to develop to their potential. But we apply the ratio of one facilitator to maximum sixteen learners

15 ACCOMMODATION, MEALS AND TRANSPORT

15.1.1 Accommodation

No accommodation is provided by P and T Technology (Pty) Ltd. There are bed and breakfast facilities as well as a Road Lodge in the area

15.1.2 Meals

No meals will be provided for during training and assessment programs

15.1.3 Transport

No transport will be provided for during training and assessment program. Public transport is available as well as the train station is within walking distance

16 RESPONSIBILITIES AND ACCOUNTABILITIES

16.1 P and T Technology (Pty) Ltd

- Provide all courseware and formative institutionalised assessment tools.
- Current courseware
- Learning material on computer
- Formative institutionalised assessment tools
- Specialised Tools, equipment and material as required during program
- Portfolio of evidence file
- Ensure alignment with unit standard requirements
- Provide documentation to the relevant SETA after training and assessment.
- All conditions as stipulated in the relevant SETA learnership contract pertaining training provider responsibilities.
- Ensure P and T Technology (Pty) Ltd has learnership accreditation.
- Liaise and coordinate with appointed representative regarding training, performance and weekly reports
- Work hours are 08:00 to 16:30 Monday to Thursday and 08:00 to 15:00 Friday. Should a learner be late an incident report will be completed and this will be reflected on the weekly performance reports.

16.2 Your Company

- Pay P and T Technology (Pty) Ltd for the institutionalized training
- Liaise and coordinate with all learners
- Ensure that learners will be released from their duties at the workplace in order to attend institutionalised training or assessments.

- Ensure P and T Technology (Pty) Ltd is provided with all additional organizational procedures and requirements timelessly in order to ensure alignment with activities and on site requirements.
- All conditions as stipulated in the relevant SETA learnership contract pertaining employer responsibilities
- Ensure all learners have necessary tools, safety equipment and opportunity in order to apply skills and knowledge on the job
- Pay the learners as per employment contract.
- Not duplicate any of P and T Technology's courseware or documentation to any other person or department without written permission from the Managing Director of P and T Technology (Pty) Ltd.
- Cancelled training and preparation will be charged for in full.

17 COSTING STRUCTURE

The costs are for the 2018 training calendar and include only stipulated training material, assessments and equipment used for training. Any other legislated or SETA changes outside the scope of this proposal and having direct impact on the costing structure will be quoted separately in order to ensure realignment to criteria. All costs quoted exclude Vat.

For any requested meeting at your site a cost for travelling will be charged at a rate of R4.60 per km for the round trip and any air or other travelling will be for the clients cost. Should accommodation be required it will be calculated at a rate equal to a 4 star accommodation. Any activity outside the scope of the proposal would need to be quoted and costed separately.

All institutionalized training costs are to be paid before training takes place

18 SHORT COURSES DESCRIPTIONS

18.1 Unit standards for Single-Phase Tester (Single-phase domestic installations)

Test, inspect and complete a certificate of compliance for a single-phase domestic installation

- Test and inspect a single-phase domestic installation (Unit Standard No. 258966)
- Complete certificate of compliance for a single-phase domestic installation (Unit Standard No. 113898)

Next training course dates: Refer to course calendar on the web page www.pandttechnology.co.za

The training program is at our training centre at 141 Lamp Road, Wadeville, Germiston where relevant tools, processes and criteria will be demonstrated and provided. Our programs are developed in such a way as to allow you to meet the requirements of the Department of Labour, in terms of accreditation application as well as to provide you with the necessary tools and expertise to confidently go out and inspect and test electrical installations using the knowledge and recourses available to you.

After successful completion of the assessment you will receive documentary proof of successful completed unit standards of inspection, testing and certification of the relevant assessment as required by the Energy Sector Education and Training Authority (EWSETA). Department of Labour Accreditation as determined by the EWSETA require by P & T Technology (Pty) Ltd to ensure competence for assessments above. Documentary proof of your process and documents used by you to inspect, test and certify any of the above type of electrical installation is a **prerequisite** for assessment process.

The assessment for competence as required will be conducted after you have collected all evidence. The assessment process will include

- Evaluation of previous coached or self-inspection and testing tests conducted by you.
- A knowledge evaluation of applicable codes or standards.
- An on site assessment to establish competence in inspection and testing and evidence recording.
- The completion of the supporting documentation of on site assessment.
- Completion of a Certificate of Compliance.
- Feedback and certification and EWSETA communication.

Target audience

- Electricians working in domestic installations
- Maintenance electricians in domestic market
- Electricians who issue Certificates of Compliance (CoC) on domestic single phase installations
- Electricians requiring assessments for Department of Labour accreditation application
- Electricians wanting to upgrade their knowledge of inspection and testing electrical installations.

Pre-requisites

Knowledge of SANS 10142-1 and relevant codes of practice linked to single phase domestic installations would be an advantage as this course applies the codes and practices

Purpose of program

To equip delegates with knowledge, skills and information to interpret codes, standards and legislation and thereby enabling them to conduct and record valid detail during single phase electrical installations inspections and tests

Contents

- Applicable Occupational Health and Safety Act 85.1993 legislation
- Identification and assessment of area to be inspected.
- Meter boards and main incomer and protections
- Main and sub boards
- Cables, wireways and protection
- Recording of results and inspection report
- Tests to be conducted and interpreting readings

- Client reports and final inspections.
- Assessment preparation for delegates requiring competence assessment

Training methodology used during course

- Interactive participative presentation
- Practical use of documentation and instruments will be done during course
- Programs are limited to a maximum of 14 delegates in order to allow delegate participation

Course documentation provided

- Occupational Health and Safety Act 85.1993 booklet
- Support material

Course documentation NOT provided

- SANS 10142-1 code of wiring

The SANS 10142-1 will not automatically be provided as part of the course training. Should you wish us to provide this code you will need to order it when enrolling for the course. The SANS 10142-1 can be purchased from SABS in Pretoria or via their web page on <https://store.sabs.co.za/>

TO BRING WITH TO THE COURSE

You will need to bring the latest version of the SANS 10142-1 with you to the course.

Course duration:- 3 days (8:30 to 16:15)

Refreshments: Tea/coffee and lunches provided for three day course only.

Certificates: All delegates assessed competent will receive a certificate and a EWSETA statement of results

Assessment criteria

The assessment for competence as required will be conducted after you have collected all evidence. The assessment process will include:-

- Evaluation of previous coached or self-inspection and testing tests conducted by you.
- A knowledge evaluation of applicable codes or standards.
- An onsite assessment to establish competence in inspection and testing and evidence recording. (This date will be allocated to the delegate during the duration of the course and cannot be changed)
- The assessment is treated as a NATIONAL EXAM where applicable and cannot be cancelled.
- All re-assessments and cancelled assessments will be levied at a cost of 45% of the course fee and no negotiations will be entered into.
- The completion of the supporting documentation of on site assessment.
- Completion of a Certificate of Compliance.
- Feedback and certification and EWSETA communication.

18.2 Unit standards for Installation Electrician (Three-phase industrial/commercial)

Test, inspect and complete a certificate of compliance for a three-phase industrial/commercial installation

- Test and inspect a three-phase industrial/commercial installation (Unit Standard No. 259197)
- Issue certificate of compliance for a domestic/commercial/industrial installation (Unit Standard No.13683)

Next training course dates: Refer to course calendar on the web page www.pandttechnology.co.za

The training program is at our training center at 141 Lamp Road, Wadeville, Germiston where relevant tools, processes and criteria will be demonstrated and provided.

Our programs are developed in such a way as to allow you to meet the requirements of the Department of Labour, in terms of accreditation application as well as to provide you with the necessary tools and expertise to confidently go out and inspect and test electrical installations using the knowledge and recourses available to you.

After successful completion of the assessment you will receive documentary proof of successful completed unit standards of inspection, testing and certification of the relevant assessment as required by the Energy Sector Education and Training Authority (EWSETA).

Department of Labour Accreditation as determined by the EWSETA require by P & T Technology (Pty) Ltd to ensure competence for assessments above. Documentary proof of your process and documents used by you to inspect, test and certify any of the above type of electrical installation is a prerequisite for assessment process.

The assessment for competence as required will be conducted after you have collected all evidence. The assessment process will include

- Evaluation of previous coached or self-inspection and testing tests conducted by you.
- A knowledge evaluation of applicable codes or standards.
- An onsite assessment to establish competence in inspection and testing and evidence recording.
- The completion of the supporting documentation of on site assessment.
- Completion of a Certificate of Compliance.
- Feedback and certification and EWSETA communication.

Target audience

- Electricians working in commercial or industrial installations
- Maintenance electricians
- Electricians who issue Certificates of Compliance (CoC) on three phase installations
- Electricians requiring assessments for Department of Labour accreditation application
- Electricians wanting to upgrade their knowledge of inspection and testing electrical installations.

Pre-requisites

Knowledge of SANS 10142-1 and relevant codes of practice linked to industrial/commercial installations would be an advantage as this course applies the codes and practices.

Purpose of program

To equip delegates with knowledge, skills and information to interpret codes, standards and legislation and thereby enabling them to conduct and record valid detail during three phase electrical installations inspections and tests.

Contents

- Applicable Occupational Health and Safety Act 85.1993 legislation
- Identification and assessment of area to be inspected.
- Transformer room and associated areas
- Main incomer and protections
- Main and sub boards including cascades
- Cables, wireways, protection and Glands

- Hazardous/specialised area identification
- Recording of results and inspection report
- Tests to be conducted and interpreting readings
- Client reports and final inspections.
- Assessment preparation for delegates requiring competence assessment

Training methodology used during course

- Interactive participative presentation
- Practical use of documentation and instruments will be done during course
- Programs are limited to a maximum of 15 delegates in order to allow delegate participation

Course documentation provide

- Occupational Health and Safety Act 85.1993 booklet
- Support material

Course documentation NOT provided

- SANS 10142-1 code of wiring

The SANS 10142-1 will not automatically be provided as part of the course training. Should you wish us to provide this code you will need to order it when enrolling for the course. The SANS 10142-1 can be purchased from SABS in Pretoria or via their web page on <https://store.sabs.co.za/>

TO BRING WITH TO THE COURSE

You will need to bring the latest version of the SANS 10142-1 with you to the course.

Course duration: - 3 days (8:30 to 16:15)

Refreshments: Tea/coffee and lunches provide for three day course only.

Certificates: All delegates assessed competent will receive a certificate and an EWSETA statement of results

Assessment criteria

The assessment for competence as required will be conducted after you have collected all evidence. The assessment process will include: -

- Evaluation of previous coached or self-inspection and testing tests conducted by you.
- A knowledge evaluation of applicable codes or standards.
- An onsite assessment to establish competence in inspection and testing and evidence recording. (This date will be allocated to the delegate during the duration of the course and cannot be changed)
- The assessment is treated as a NATIONAL EXAM where applicable and cannot be cancelled.
- All re-assessments and cancelled assessments will be levied at a cost of 45% of the course fee and no negotiations will be entered into.
- The completion of the supporting documentation of on site assessment.
- Completion of a Certificate of Compliance.
- Feedback and certification and EWSETA communication.

18.3 Unit standards for Master Installation Electrician (Hazardous/specialised areas)

Test, inspect and complete a certificate of compliance for an electrical installation in a hazardous area

- Test and inspect an electrical installation in a hazardous area (Unit Standard No. 13821)
- Issue certificate of compliance for an electrical installation in a hazardous area (Unit Standard No. 13684)

Next training course dates: Refer to course calendar on the web page www.pandttechnology.co.za

The training program is at our training centre at 141 Lamp Road, Wadeville, Germiston where relevant tools, processes and criteria will be demonstrated and provided.

Our programs are developed in such a way as to allow you to meet the requirements of the Department of Labour, in terms of accreditation application as well as to provide you with the necessary tools and expertise to confidently go out and inspect and test electrical installations using the knowledge and recourses available to you.

After successful completion of the assessment you will receive documentary proof of successful completed unit standards of inspection, testing and certification of the relevant assessment as required by the Energy Sector Education and Training Authority (EWSETA).

Department of Labour Accreditation as determined by the EWSETA require by P & T Technology (Pty) Ltd to ensure competence for assessments above. Documentary proof of your process and documents used by you to inspect, test and certify any of the above type of electrical installation is a prerequisite for assessment process.

The assessment for competence as required will be conducted after you have collected all evidence. The assessment process will include

- Evaluation of previous coached or self-inspection and testing tests conducted by you.
- A knowledge evaluation of applicable codes or standards.
- An onsite assessment to establish competence in inspection and testing and evidence recording.
- The completion of the supporting documentation of on site assessment.
- Completion of a Certificate of Compliance.
- Feedback and certification and EWSETA communication.

Target audience

- Electricians working in hazardous/specialised installations
- Maintenance electricians
- Electricians who issue Certificates of Compliance (CoC) on hazardous/specialised installations
- Electricians requiring assessments for Department of Labour accreditation application
- Electricians wanting to upgrade their knowledge of inspection and testing in hazardous/specialised electrical installations.

Pre-requisites

Knowledge of relevant codes of practice linked to hazardous/specialised installations would be an advantage as this course applies the codes and practices.

Purpose of program

To equip delegates with knowledge, skills and information to interpret codes, standards and legislation and thereby enabling them to conduct and record valid detail during hazardous/specialised electrical installations inspections and tests.

Contents

- Applicable Occupational Health and Safety Act 85.1993 legislation
- Identification and assessment of area to be inspected.
- Hazardous/specialised area identification and zoning
- Recording of results and inspection report

- Tests to be conducted and interpreting readings
- Client reports and final inspections.
- Assessment preparation for delegates requiring competence assessment
- Practical application for inspecting and testing

Training methodology used during course

- Interactive participative presentation
- Practical use of documentation and instruments will be done during course
- Programs are limited to a maximum of 15 delegates in order to allow delegate participation

Course documentation provide

- Training manual and Support material

TO BRING WITH TO THE COURSE

- The following codes need to be brought with to the Masters course.
- SANS 60079 – 10-1: Explosive atmospheres Part 10-1 Classification of areas Explosive gas atmospheres
- SANS 10108 : The classification of hazardous locations and the selection of apparatus for use in such locations (used with ARP 0108)
- ARP 108: Regulatory requirements for explosion protected

The codes can be bought from SABS in Pretoria or via their webpage <http://www.store.sabs.co.za/> where they will send you a PDF version of the code

Course duration:- 5 days (8:30 to 16:15)

Refreshments: Tea/coffee and lunches provided for five day course only

Certificates: All delegates assessed competent will receive a certificate and a EWSETA statement of results

Assessment criteria

The assessment for competence as required will be conducted after you have collected all evidence. The assessment process will include:-

- Evaluation of previous coached or self-inspection and testing tests conducted by you.
- A knowledge evaluation of applicable codes or standards.
- An onsite assessment to establish competence in inspection and testing and evidence recording. (This date will be allocated to the delegate during the duration of the course and cannot be changed)
- The assessment is treated as a NATIONAL EXAM where applicable and cannot be cancelled.
- All re-assessments and cancelled assessments will be levied at a cost of 45% of the course fee and no negotiations will be entered into.
- An onsite assessment to establish competence in inspection and testing and evidence recording.
- The completion of the supporting documentation of on site assessment.
- Completion of a Certificate of Compliance.
- Feedback and certification and EWSETA communication.

18.4 Installation Rules Paper 1

Our Installation Rules Paper 1 program is used to prepare a learner for the national exam Installation Rules. This exam is required as part of the criteria by the Department of Labour to apply to become an installation electrician. The Examination Instruction 08 of 2009 (IEMIE Syllabus) can be found on our web site.

The program is conducted by means of part time course where the candidate will attend after hours classes on Tuesdays and Thursdays evening from 17H00 to 19H00 hours. Installation Rules Paper 1 and Installation Rules Paper 2 will not be offered in the same block.

Installation Rules Paper 1 Program Content

- Occupational Health and Safety Act, Act 85 of 1993 Section 1, 8, 9, 10 and 22
- Occupational Health and Safety Act, Act 85 of 1993 - Electrical Installation Regulations. Regulations 1 to 14
- Occupational Health and Safety Act, Act 85 of 1993 - Electrical Machinery Regulations. Regulation 1, 3, 5, 6 and 11
- Occupational Health and Safety Act, Act 85 of 1993 - Construction Regulations. Regulations 22
- SANS 10142-1
- The wiring of premises Part 1: Low voltage installations
- Section 1 - Scope
- Section 2 - Normative references
- Section 3 – Definitions
- Section 4 – Compliance
- Section 5 - Fundamental requirements
- Section 7 - Special installations or locations
- Annexure D - Example of assessing estimated and connected load.
- Annexure F - Recommended bending of cables
- Annexure G - Examples of determining the conduit size required for single-core cables of different sizes.
- Annexure J - Explanation of IP ratings
- Annexure M - Electricity supply systems
- Annexure P - Authority for issuing a Certificate of Compliance
- Annexure Q - IEC symbols associated with switchgear
- SANS 10198-1:2004 The selection, handling and installation of electric power cables of rating not exceeding 33 kV Part 1: Definitions and statutory requirements
- SANS 10198-2:2004 The selection, handling and installation of electric power cables of rating not exceeding 33 kV Part 2: Selection of cable type and methods of installation NOTE: No calculations will be asked on this standard
- SANS 10292:2001 Earthing of low-voltage (LV) distribution systems

Target audience: Any person who intends to write Installation Rules Paper 1 exams as administered by the Department of Education on behalf of the Department of Labour.

Pre-requisites: Have all the required codes and standards

Codes required to bring with to the course

Note these codes and standards do not form part of the course cost and must be purchased prior to participation on the program.

- SANS 10142-1
- SANS 10198
- SANS 1973-3-2
- SANS 10198-1
- SANS 10292
- Occupational Health and Safety Act, Act 85 of 1993

Course duration: Eight weeks part time training. Tuesdays and Thursdays (17:00 – 19:00) and One Saturday close to the exam

Refreshments: Tea and coffee provided. Meals are not provided

18.5 Installation Rules Paper 2

Our Installation Rules Paper 2 program is used to prepare a learner for the national exam Installation Rules. This exam is required as part of the criteria by the Department of Labour to apply to become an installation electrician. The Examination Instruction 08 of 2009 (IEMIE Syllabus) can be found on our web site.

The program is conducted by means of part time course where the candidate will attend after hours classes on Tuesday and Thursday evening from 17H00 to 19H00 Hours. Installation Rules Paper 1 and Installation Rules Paper 2 will not be offered in the same block.

Installation Rules Paper 2 program content

- SANS 10142-1 2008: The wiring of premises Part 1: Low voltage installations
- Section 6 - Installation requirements
- Section 8 - Verification and certification
- Annexure B - Limits of “arm’s reach”
- Annexure C - Installation components
- Annexure E - Calculation of voltage drop
- Annexure K - Notification of a potential danger
- Annexure L - Installations of surge protection devices (SPDs) into low-voltage systems
- Annexure N - Earthing arrangements and equipotential bonding of information technology installations for functional purposes
- Annexure O - Classification of safety services necessary for medical locations
- SANS 1973-3:2008 Low-voltage switchgear and control gear assemblies Part 3: Safety of assemblies with a rated prospective short-circuit current of up to and including 10 kA
- Basic calculations

Target audience; Any person who intends writing Installation Rules Paper 2 exams as administered by the Department of Education on behalf of the Department of Labour

Pre-requisites: Have all the required codes and standards

Codes required to bring with to the course

Note these codes and standards do not form part of the course cost and must be purchased prior to participation on the program.

- Occupational Health and Safety Act, Act 85 of 1993
- SANS 10142-1
- SANS 10198-1
- SANS 10198-2
- SANS 10292
- SANS 1973-3

Course duration: Eight weeks part time training. Tuesdays and Thursdays (17:00 – 19:00) and one Saturday close to the exam

Refreshments: Tea and coffee provided. Meals are not provided

19 FOREIGN QUALIFICATION PRACTICAL EVALUATION

Foreign Qualification Practical Evaluation (as per OHS 3/1/5/7/9)

P and T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider with the Energy SETA.

The Training and Development Assessment Centre at 141 Lamp Road, Wadeville, Germiston, offers a Foreign Practical Evaluation, in order to verify foreign qualifications electrical practical competence as required for application to Department of Labour for registration as a registered person.

OHS 3/1/5/7/9 Registration as a registered person as revised January 2010 Registration Criteria Section 4 FOREIGN QUALIFICATIONS states that :-

Candidates are required to have all their theoretical foreign qualifications evaluated by the South Africa Qualification Authority (SAQA) and the practical qualifications verified by ESETA accredited providers.

The Foreign Practical Evaluation will provide information about the practical skills of a candidate and will be aligned to the National Qualifications as recognised by The South African Qualifications Authority Foreign Qualification Certificate of Evaluation. (You will be required to produce the Certificate of Evaluation with your application in order to ensure the correct assessment is conducted)

The practical evaluation has been developed so that it covers elements that will be required for the qualifications as per certificate of evaluation and qualification below.

SAQA QUAL ID	QUALIFICATION TITLE	NQF Level
72051	National Certificate: Electrical Engineering	03
72052	Further Education and Training Certificate: Electrical Engineering	04

The Qualifications can be found on the SAQA web page - www.saqa.org.za

Target audience

Candidates in possession of an Electrical Foreign Qualification Certificate of Evaluation and are pursuing registration with the South African Department of Labour in order to be registered by the Chief Inspector as an Electrical Tester for Single Phase, Installation Electrician and Master Installation Electrician as defined in the Electrical Installation Regulation.

Pre-requisites

- Foreign Qualification Certificate of Evaluation as issued by SAQA

Evaluation duration: 2 days

Next evaluation dates: Please enquire at our offices for a date for the evaluation.

Refreshments: Refreshments and meals not provided.

NOTE:

You will **not** receive a certificate on successful completion of the practical evaluation. You will only receive a letter addressed to the Department of Labour indicating that your practical competence was assessed and was aligned to the relevant qualification awarded as per your Foreign Qualification Certificate of Evaluation

20 SINGLE PHASE TESTER CRITERIA

20.1 Single phase assessment program and assessment (Single Phase Tester Criteria)

P & T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider. The training and development centre at the 141 Lamp Road, Wadeville, Germiston, offers a development preparation program and assessment for persons with more than 5 years relevant experience who wish to apply to the Department of Labour under option 3 as a Single Phase Tester.

Next course dates: Date will be provided on application

Our program will provide you with the necessary skills and knowledge to confidently ensure a positive result. In this program all candidates must have a language and proficiency of ABET level 4 as they are required to interpret codes and criteria associated with single phase installations.

Note: - Our program is developed in such a way as to cater for your needs and make you more skilful in the profession you are currently in. We guarantee complete support to all candidates thus bringing out the best in every person. This program is developed to accommodate candidates that are applying for a single phase licence under option 3 of the Department of Labour information brochure.

The practical training program will include but is not limited to the following:

- Electrical wire ways
- Install and commission electrical measuring instruments and control devices
- Select and use electrical measuring instruments
- Install luminaries
- Design and construct single phase circuits
- Install and commission single phase AC machines and control gear
- Test and inspect a single phase domestic installation.
- Fault find on single phase AC systems (single phase motor)
- Install and terminate low voltage cables and conductors
- Wire and commission domestic electrical circuits (stove, geysers, socket outlets, lights, motors etc.)

Target audience

- Electricians working in Domestic installations.
- Electricians wanting to upgrade their knowledge on single phase installations, motors and starters.
- Electricians requiring assessment for single phase testers registration.

Pre-requisites

- Written proof of 5 or more years relevant experience in the single phase electrical industry.
- Personal Protective Equipment (PPE) - overalls and safety shoes are required. No person will be permitted in the assessment or training centre to work without this PPE.
- Own tools and test equipment.

Purpose of program

To equip delegates with knowledge, skills and information relating to single phase electrical installations

Training methodology used during course

- Practical use of documentation, instruments and components
- Knowledge evaluation on Basic principles of electricity.

Documentation provide: Supporting material

Course duration: 3 weeks including assessment

Refreshments: Meals are not provided

Certificates: All candidates being assessed competent will receive a certificate of competence.

20.2 Single phase assessment (Single Phase Tester criteria)

P & T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider

The training and development centre at the 141 Lamp Road, Wadeville, Germiston, offers the assessment for persons with more than 5 years relevant experience who wish to apply to the Department of Labour under option 3 as a Single Phase Tester.

Next assessment dates: Date will be provided on application

Our assessment will assess your skills and knowledge to confidently ensure you have the competencies as required for the single phase tester. For this assessment all candidates must have a language and proficiency of ABET level 4 as they are required to interpret codes and criteria associated with single phase installations.

We guarantee complete support to all candidates thus bringing out the best in every person.

This assessment is developed to assess candidates that are applying for a single phase licence under option 3 of the Department of Labour information brochure.

The practical assessment program will include but is not limited to the following:

- Electrical wire ways
- Install and commission electrical measuring instruments and control devices
- Select and use electrical measuring instruments
- Install luminaries
- Design and construct single phase circuits
- Install and commission single phase AC machines and control gear
- Test and inspect a single phase domestic installation.
- Fault find on single phase AC systems (single phase motor)
- Install and terminate low voltage cables and conductors
- Wire and commission domestic electrical circuits (stove, geysers, socket outlets, lights, motors and etc.)

Target audience

- Electricians working in Domestic installations.
- Electricians wanting to upgrade their knowledge on single phase installations, motors and starters.
- Electricians requiring assessment for single phase testers registration.

Pre-requisites

- Written proof of 5 or more years relevant experience in the single phase electrical industry.
- Personal Protective Equipment (PPE) - overalls and safety shoes are required. No person will be permitted in the assessment centre or to work without this PPE.
- Own tools and test equipment.

Documentation provided: Only assessment documentation

Assessment duration: 2 days

Refreshments: Meals and Refreshments are not provided

Certificates: All candidates being assessed competent will receive a certificate of competence.

20.3 Single phase evaluation (Single phase tester criteria)

P & T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider

The training and development centre at the 141 Lamp Road, Wadeville, Germiston, offers a Single phase evaluation in order to identify gaps in skills and/or knowledge against the Single phase assessment (Single phase tester criteria)

Next evaluation dates: Date will be provided on application

Our single phase evaluation assessment will provide information about knowledge and skills gaps as required in order to partake in the Single phase assessment (Single phase tester criteria).

Note: - Our assessment program is developed in such a way as to identify skills and knowledge required for the Single phase assessment (Single phase tester criteria). and this is not a training intervention.

We guarantee complete support to all candidates thus bringing out the best in every person.

The practical assessment program will include but is not limited to the following:

- Electrical wire ways
- Install and commission electrical measuring instruments and control devices
- Select and use electrical measuring instruments
- Install luminaries
- Design and construct single phase circuits
- Install and commission single phase AC machines and control gear
- Test and inspect a single phase domestic installation.
- Fault find on single phase AC systems (single phase motor)
- Install and terminate low voltage cables and conductors
- Wire and commission domestic electrical circuits (stove, geysers, socket outlets, lights, motors and etc.)

Target audience

- Electricians working in Domestic installations.
- Electricians wanting to upgrade their knowledge on single phase installations, motors and starters.
- Electricians requiring assessment for single phase testers registration.

Pre-requisites

- Written proof of 5 or more years relevant experience in the single phase electrical industry.
- Personal Protective Equipment (PPE) - overalls and safety shoes are required. No person will be permitted in the assessment centre or to work without this PPE.
- Own tools and test equipment.

Assessment duration: 1 day

Refreshments: Meals and Refreshments are not provided

NOTE:

We will assess your skills and knowledge as required for the Single phase assessment (Single phase tester criteria)

20.4 Single phase knowledge test (Single Phase Tester)

P & T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider. The training and development centre at the 141 Lamp Road, Wadeville, Germiston.

Next test dates: Date will be provided on application

This test is developed for the candidates that are applying for a single phase license under option 3 of the Department of Labour information brochure. The Knowledge test will include but is not limited to the following

Atomic theory

- Matter
- Atom
- Electrons
- Electron flow

Conductors and Insulators

- Conductors
- Meaning of terms
- Comparison between aluminium and copper
- Insulators
- Types and uses of insulators

External power source

- Electrical measurements and terminology
- Potential difference or voltage
- Voltage drop across resistor

Power generation and distribution

- AC/DC Power Generation and distribution
- Operation of a DC generator
- AC Generator (alternator)
- Ohms law
- SI units
- Prefixes
- Symbols
- Voltage, current and resistance
- Power and energy
- Kirchoff's current law states:

Target audience

- Electricians working in Domestic installations.
- Electricians wanting to upgrade their knowledge on Single phase motors and starters.
- Electricians requiring assessment at Assessment centre for Single phase licence

Pre-requisites: Written proof of 5 or more years' experience in the Single phase electrical industry

Purpose of test: To establish candidate's knowledge relating to single phase electrical installations

Documentation provide: Test material

Test duration: 3 Hours

Practical : None

Refreshments: Meals and Refreshments are not provided

Certificates: No certificate only a statement of results

20.5 Single phase evaluation (Single phase tester criteria)

P & T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider.

The training and development centre at the 141 Lamp Road, Wadeville, Germiston, offers a Single phase evaluation in order to identify gaps in skills and/or knowledge against the Single phase assessment (Single phase tester criteria)

Next evaluation dates: Date will be provided on application

Our single phase evaluation assessment will provide information about knowledge and skills gaps as required in order to partake in the Single phase assessment (Single phase tester criteria).

Note: - Our assessment program is developed in such a way as to identify skills and knowledge required for the Single phase assessment (Single phase tester criteria). and this is not a training intervention.

We guarantee complete support to all candidates thus bringing out the best in every person.

The practical assessment program will include but is not limited to the following:

- Electrical wire ways
- Install and commission electrical measuring instruments and control devices
- Select and use electrical measuring instruments
- Install luminaries
- Design and construct single phase circuits
- Install and commission single phase AC machines and control gear
- Test and inspect a single phase domestic installation.
- Fault find on single phase AC systems (single phase motor)
- Install and terminate low voltage cables and conductors
- Wire and commission domestic electrical circuits (stove, geysers, socket outlets, lights, motors and etc.)

Target audience

- Electricians working in Domestic installations.
- Electricians wanting to upgrade their knowledge on single phase installations, motors and starters.
- Electricians requiring assessment for single phase testers registration.

Pre-requisites

- Written proof of 5 or more years relevant experience in the single phase electrical industry.
- Personal Protective Equipment (PPE) - overalls and safety shoes are required. No person will be permitted in the assessment centre or to work without this PPE.
- Own tools and test equipment.

Assessment duration: 1 day

Refreshments: Meals and Refreshments are not provided

NOTE:

We will assess your skills and knowledge as required for the Single phase assessment (Single phase tester criteria)

21 TRADE TEST

21.1 Trade test evaluation

We are only able to administer the electrical trade test evaluation. Should you wish to do an evaluation for our other trades we are able to assist with a training provider who can supply this service

P and T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider with QCTO, Energy & Water SETA, CHIETA and the Construction Seta. We are an accredited Electrical Trade test centre.

The training and development centre at the 141 Lamp Road, Wadeville, Germiston, offers a trade test evaluation in order to identify gaps in skills and/or knowledge. We offer trade test evaluation for Electrician, Mechanical fitter, Millwright and Instrumentation Mechanician. The Electrical trade test evaluation will take place at our training centre. The Mechanical fitter, Millwright and Instrumentation Mechanician will take place at an accredited trade test centre that we partner with.

Next evaluation dates: Date will be provided when booking for the evaluation

Our trade test evaluation assessment will provide information about knowledge and skills gaps as required in order to partake in the National trade test. It is our experience that although candidates have could show sufficient knowledge of the required activities and expectations at Trade Test, they are unsuccessful in the trade test as tasks in the trade test need to be completed in a specific time.

Pre-requisites

Must meet relevant criteria in order to do the trade test

Assessment duration:

1 day for Electrical

2 days for Mechanical fitter, Millwright and Instrumentation Mechanician

Refreshments

Meals and refreshments excluded. Please bring your own.

NOTE:

This is not a trade test and does not guarantee access to the trade test.

We will assess your skills and knowledge as required for the r

21.2 Brush up training

P and T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider with QCTO, Energy & Water SETA, CHIETA and the Construction Seta. The training and development centre is situated at 141 Lamp Road, Wadeville, Germiston. We are able to provide Brush up training for Mechanical fitter, Millwright and Instrumentation Mechanician on request

Our support will assist you with the necessary skills and knowledge to confidently ensure a positive result at trade test. It is our experience that although candidates have sufficient knowledge of the required activities and expectations at Trade Test, they are unsuccessful as tasks need to be completed in a specific time. As a result of circumstances and conditions candidates fail to complete the tasks in the allocated time. Time allowed for all tasks is emphasised.

Pre-requisites

- Must meet relevant criteria in order to do the trade test
- Trade test evaluation

Training methodology

- Support

Course duration:

Three weeks full time training

Refreshments

Meals excluded.

No refreshments

21.3 Trade test application

We are accredited by the QCTO, CETA, EWSETA and CHIETA for the electrical trade test.

Each SETA has their own application form that needs to be completed.

Applicants need to ensure that they meet the criteria for the Trade test before making application.

The trade test application form can be requested from Janine Oliver on 0118274113/6 or janine@pandttechnology.co.za

22 KNX BUILDING AUTOMATION

22.1 KNX certified basic course



“KNX is the worldwide leader in home and building automation, bringing thousands of users and professionals in a unique technological world ready for the future.”

P and T Technology (Pty) Ltd is a certified KNX training center and offers the Basic and advanced KNX training course as prescribed by the KNX association. The training program is at our training center at 141 Lamp Road, Wadeville, Germiston

To verify the certification please log onto the following link:

<https://knx.org/knx-en/community/training-centres/list/?country=South+Africa&searchOption=name>

Target audience

- Electricians
- Potential home automation installers

Pre-requisites

- Solid computer knowledge
- Good understanding of electrical installation work

Purpose of program

- To become a KNX partner
- To become a KNX installer

Contents of the course

The KNX Basic course consists of the following topics:

- KNX Project design ETS professional : Basic
- KNX RF
- KNX Commissioning ETS
- KNX Diagnostics & trouble shooting ETS
- KNX System arguments
- KNX System overview
- KNX TP Topology
- KNX TP Telegram
- KNX Bus devices
- KNX TP installation
- KNX Powerline

Training methodology used during course

- Minimum 2 maximum 4 persons per course

Course documentation provide: Relevant manual

Course duration: 5 Days Monday to Friday from 08:00 – 16:30

Refreshments: Tea/coffee and lunches provided for full day courses

Assessment criteria

There are two exams at the end of the course, a practical and theory. A mark of 60% is needed to pass each exam

Final outcomes after successful completion of the course and exam obtainable through the KNX association

- An ETS lite software license
- After passing the exam - the right to use the KNX logo in your marketing (subject to terms and conditions of the KNX association)
- After passing the exam - a discount on the purchase of ETS professional

- After passing the exam - an entry on the KNX international website of certified persons
- After passing the exam - the right to become a KNX partner

Certificates

A KNX basic course certificate, downloadable from your KNX account, will be issued on successful completion of the course.

TERMS AND CONDITIONS

- KNX course classes are limited to 4 per class.
- Before booking and paying for a program please confirm if a program is fully booked or not.
- Application to be made by means of completing and returning enrolment form via web page, email or fax.
- We will communicate with you in five working days, if we have not communicated with you in this time please contact our office.
- Once your application is received, an invoice is generated and the payment will be due.
- On DIRECT TRANSFERS or DEPOSITS please quote invoice number.
- Fax or email proof of payment to 011 827 4118 or liz@pandttechnology.co.za.
- Bookings will only be confirmed when the payment is confirmed.
- You will only be permitted to attend the course if the payment has been made.
- Payments need to be received 7 working days prior to any course attendance.
- P and T Technology (Pty) Ltd reserves the right to cancel any program should there be less than 2 persons
- By forwarding the request for training or/and assessment you declare that you have read and understand the course /assessment criteria
- P and T Technology (Pty) Ltd does not do accommodation bookings and cannot be liable for any issues relating to accommodation.

22.2 KNX certified advanced course



KNX is the worldwide leader in home and building automation, bringing thousands of users and professionals in a unique technological world ready for the future."

P and T Technology (Pty) Ltd is a certified KNX training center and offers the Basic and advanced KNX training course as prescribed by the KNX association. The training program is at our training center at 141 Lamp Road, Wadeville, Germiston

Target audience

- Electricians
- Potential home automation installers

Pre-requisites

- Basic course certificate

Purpose of program

- To increase and advance your basic KNX knowledge

Contents of the course

The KNX Advanced course consists of the following topics:

- Fail-safe planning
- Flags
- HVAC control with KNX
- Integrated applications
- Interworking
- Couplers
- Lighting control
- Security technology
- Logic operations
- Visualisations systems
- ETS apps
- KNX and multimedia
- KNX and smart metering /smart grid

Training methodology used during course

- Minimum 2 maximum 4 persons per course

Course documentation provide: Relevant manual

Course duration: 5 Days Monday to Friday from 08:00 – 16:30 (30 hours)

Refreshments: Tea/coffee and lunches provide for all day courses

Assessment criteria

There are two exams at the end of the course, a practical and theory. A mark of 60% is needed to pass each exam

Final outcomes after successful completion of the course and exam

- After passing the exam - an additional entry on the KNX international website indicating you attended the advanced course

Certificates

A KNX advance course certificate, downloadable from your KNX account, will be issued on successful completion of the course.

TERMS AND CONDITIONS

- Short course classes are limited to 4 per class.
- Before booking and paying for a program please confirm if a program is fully booked or not.
- Application to be made by means of completing and returning enrolment form via web page, email or fax.
- We will communicate with you in five working days, if we have not communicated with you in this time please contact our office.
- Once your application is received, an invoice is generated and the payment will be due.
- On DIRECT TRANSFERS or DEPOSITS please quote invoice number.
- Fax or email proof of payment to 011 827 4118 or liz@pandttechnology.co.za.
- Bookings will only be confirmed when the payment is confirmed.
- You will only be permitted to attend the course if the payment has been made.
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- P and T Technology (Pty) Ltd reserves the right to cancel any program should there be less than 2 persons
- By forwarding the request for training or/and assessment you declare that you have read and understand the course /assessment criteria
- P and T Technology (Pty) Ltd does not do accommodation bookings and cannot be liable for any issues relating to accommodation.

23 SKILLS PROGRAMS

23.1 Safety in the workplace, hand tools and power tools

(Identify and use hand tools and power tools safely in a work environment)

P & T Technology (Pty) Ltd Electrical Competency Training Institute is an accredited provider. The training and development centre at the 141 Lamp Road, Wadeville, Germiston offers a development program for persons on a closely managed facilitation basis.

Our program will provide you with the necessary skills and knowledge to confidently ensure a positive result at the workplace. It is our experience that although candidates have experience and knowledge to identify and use hand tools and power tools, they do not always use them correctly according to manufactures guidelines or instructions or safe working principles, thereby posing a risk to themselves as well as persons who could be affected by their actions. All practical and theory regarding identification and use is emphasised. We guarantee complete support to all candidates thus bringing out the best in every person.

NOTE: - Our program is unit standard aligned and developed in such a way as to cater for your needs and make you more skilful in the profession you are currently in.

The practical training program will include identifying, inspecting, using, maintaining and caring for engineering hand tools and power tools but is not limited to the following:

- Hand saws
- Hammers
- Screw drivers
- Sockets and spanners
- Side cutters and pliers
- Drill bits
- Measuring and marking off tools
- Drilling machines
- Grinders and sanders

Statutory requirements include but are not limited to SABS, OSH Act and manufacturer's specifications.

Target audience

- Handyman
- General workers
- Semi skilled workers
- Persons required to work with various hand tools and/or power tools

Pre-requisites

- A minimum of 2 years practical experience in the workplace
- ABET 4

Purpose of program

To equip delegates with knowledge, skills and information to Identify and use hand tools and power tools safely in a work environment.

Training methodology used during course

- Interactive participative presentation
- Practical use of hand tools and power tools safely in a work environment will be done during the course.

Course documentation provide: Supporting material

Course duration: 5 days training including an assessment

Refreshments; No refreshments or meals included.

Certificates: All delegates assessed competent will receive a certificate of competence

24 ANNEXURE A - COST STRUCTURE FOR 2018

COURSE COSTS APRIL TO DECEMBER 2018	
Course Name	Training and Assessment
Inspect, test and certify and single phase electrical installations without SANS 10124-1	R 8 635.09
Inspect, test and certify and three phase electrical installations without SANS 10124-1	R 9 885.96
Inspect, test and certify and hazardous electrical installations	R 11 324.48
Installation rules (Paper 1& 2)	R 4 539.48
Re-assessment Inspect, test and certify and single phase electrical installations	R 3 885.80
Re-assessment Inspect, test and certify and three phase electrical installations	R 4 048.684
Re-assessment Inspect, test and certify and hazardous electrical installations	R 5 096.32
Cost of SANS 10142-1:2017 (ED. 2.00) for Single phase & three phase course	R 883.20
Assessment	Cost
RPL assessment	R 5 378.77
RPL assessment (Learnerships)	R 5 378.77
Safety in the workplace – Hand tools and power tools	R 4 978.29
Foreign Qualification Practical Evaluation	R 5 507.89
Trade test criteria	Cost
Trade test evaluation	R 4 233.82
Gap closure training	R 4 233.82 / week
Trade test preparation (ESETA and CHIETA) 3 weeks	R 11 757.24
Training program (per week)	R 3 919.08
Pre-preparation 5 days and less (cost per day)	R 783.82
Single phase tester criteria	Cost
Single phase Assessment (Single phase tester criteria)	R 3 582.15
Single phase assessment program and assessment (Single Phase Tester Criteria)	R 12 508.77
Single phase evaluation (Single Phase Tester Criteria)	R 4 233.82
Single phase knowledge test (Single Phase Tester)	R 691.00
Training program (per week)	R 3 919.08
Pre-preparation 5 days and less (cost per day)	R 783.82
Trade Test applications (accredited by QCTO, ESETA and CHIETA)	Cost
Trade Test applications (CHIETA, EWSETA)	R 3 197.81
Trade Test applications (CETA)	R 4 539.48

KNX training – Home automation	Cost
KNX certified basic training	R 10 147.23
KNX certified advanced training	R 10 147.23

Apprenticeships Electrical, Instrumentation, Fitter & Millwright	Cost
1 st year / Phase 1 (10 weeks)	R 36 570.00
2 nd year / Phase 2 (10 weeks)	R 36 570.00
3 rd year / Phase 3 (10 weeks)	R 36 570.00
Apprenticeship training per week	R 3 657.00

Learnerships NQF 2-4 Electrical, Instrumentation, Fitter, (for current learners in the system	Cost
NQF 2 / 1 st year (12 weeks)	R 43 883.60
NQF 3 / 2 nd year (12 weeks)	R 43 883.60
NQF 4 / 3 rd year (12)	R 43 883.60
Learnership training per week	R 3 652.80

P AND T TECHNOLOGY (PTY) LTD RESERVE THE RIGHT TO CHANGE THE COSTS AT ANY TIME

25 COURSE CALENDAR 2018

COURSE CALENDAR January 2018 to December 2018

Course Name (Unit Standards)	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov
Inspect, test and certify and single phase electrical installations		7-9			2-4				5-7		
Inspect, test and certify and three phase electrical installations		14-16	14-16		9-11		4-6		12-14		1-3
Inspect, test and certify and hazardous electrical installations		19-23			14-18			13-17		15-19	
KNX building automation		19-23	12-16		14-18			13-17		15-19	

Course Name (Part time courses)	Program 1 Paper 1	Program 2 Paper 2	Program 3 Paper 1
Installation rules Tuesdays & Thursdays - 8 weeks	23 Jan -15 March	8 May to 28 June	28 Aug – 26 Oct No class 25 & 27 Sept

Evaluation and assessments	Dates
Trade test evaluation	Application to be made for a date
Single phase assessment (Single phase tester criteria)	Application to be made for a date
Single phase knowledge test (Single phase tester)	Application to be made for a date
Foreign Qualification Practical Evaluation	Application to be made for a date

Course Name	Dates
Trade test preparation	Application to be made for a date
Gap closure training	Application to be made for a date
Single phase assessment program and assessment (Single phase tester criteria)	Application to be made for a date
RPL assessments	Application to be made for a date
Safety in the workplace – Hand tools and power tools	Application to be made for a date

Apprenticeships (NB: Learners need an employer)	Dates
Electrical, Mechanical Fitter. Instrument Mechanician and Millwright	1 st block 15 January to 23 March 2018 2 nd block 9 April to 15 June 2018 3 rd block 2 July to 7 September 2018 4 th block 1 October to 7 December 2018

Learnerships (NB: Learners need an employer) ONLY FOR LEARNERS CURRENTLY IN THE SYSTEM BUSY WITH TRAIN OUT PHASE OF TRAINING	Dates
NQF Level 2 , 3 & 4 Electrical Engineering (Construction)), Mechanical Fitter, Instrument	1 st block 8 January to 29 March 2018 2 nd block 9 April to 29 June 2018 3 rd block 2 July to 21 September 2018 4 th block 1 October to 14 December 2018
RPL assessments (Learnerships)	Application to be made for a date

Trade Test (accredited by NAMB, CETA CHIETA and EWSETA)	
Contracted Electrical Trade test (Persons registered on a apprentice/learnership contract)	Application to be made for a date
RPL Electrical Trade Test (Persons with no formal training)	Application to be made for a date

Please note: Enrolment is essential for all our courses, evaluations and assessments