



**SOUTH AFRICAN COUNCIL FOR PROFESSIONAL AND
TECHNICAL SURVEYORS**

ESTABLISHED IN TERMS OF ACT 40 OF 1984

**SUID-AFRIKAANSE RAAD VIR PROFESSIONELE EN
TEGNIESE OPMETERS**

INGESTEL INGEVOLGE WET 40 VAN 1984

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**NOTES FOR GUIDANCE FOR REGISTRATION AS A
SURVEY TECHNICIAN IN THE ENGINEERING CATEGORY**

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1. INTRODUCTION

These notes which have been approved by the South African Council for Professional and Technical Surveyors, have been compiled with a view to assisting students at a recognised Provider of Education and Training who intend qualifying for registration as a Survey Technician (Engineering) provided for in terms of the Professional and Technical Surveyor's Act, Act 40/1984. Adherence to the requirements as set out below will assist the candidate materially in avoiding unnecessary delays.

2. GENERAL

- 2.1 After obtaining a recognised qualification and completing a suitable period of approved training, and the passing of a law examination, a candidate may apply to be registered as a Survey Technician (Engineering).
- 2.2 A Survey Technician (Engineering) may describe him or herself as such, use the appropriate letters ST after his or her name BUT may only work under the personal supervision of a suitably qualified person.

3. REQUIREMENTS

- 3.1 A Certified copy of the National Diploma or an equivalent recognised by the Council
- 3.2 A Certificate to the effect that the experiential training by the candidate had been approved by the recognised Provider of Education and Training. **SEE ANNEXURE A**
- 3.3 If in the opinion of Council the training as required in Section 3.2 above is insufficient, a trial survey or equivalent practical test has to be completed.
- 3.4 The passing of a law examination as outlined in Section 6.6.
- 3.5 The relevant application form completed before a Commissioner of Oaths.

4. PROCEDURE

- 4.1 Submit the application form with all the supporting documentation to the Registrar with the prescribed application fee.
- 4.2 The Registrar informs the candidate of the date and venue of the law exam.
- 4.3 If the application is successful, the Registrar notifies the candidate and sends him or her Oath/Affirmation form for completion and submission with the relevant registration form noting the fees required.

5. PRACTICAL TRAINING.

- 5.1 The period of practical training required in terms of the Rules is 220 working days. Such training could be completed as part of the work integrated learning (WIL) component of the National Diploma or equivalent. In such cases a training certificate issued by the recognised Provider of Education and Training is required. The nature of such training shall be as set out in Paragraph 5.2 below. **SEE ANNEXURES A and B. The Training Schedule on ANNEXURE B or a similar schedule will in such cases normally form part of the WIL Log Book issued by the recognised Provider of Education and Training.**

5.2 Training must be varied and can include cadastral, engineering/construction, topographical, control surveys, hydrographic surveys, and photogrammetric surveys. The work must be undertaken under the personal supervision of a professional surveyor or engineering surveyor registered in terms of the Act, or such other person whom the Council considers suitable.

5.2.1 COMPULSORY TRAINING.

80 working days in basic survey work comprising:

	TYPE OF SURVEY	WORKING DAYS
1	TRIANGULATION: By angular measurement; By distance measurement; By GPS, where applicable.	20
2	LEVELLING: Spirit levelling; Precise levelling; Trigonometric levelling; Heighting by GPS where applicable; Adjustment of a levelling network.	15
3	TRAVERSING: Using total stations or EDM equipment; Checked by GPS, if equipment available.	15
4	TOPOGRAPHICAL SURVEYING Detail surveying by total station, GPS or traditional methods. Includes Photogrammetric Field Work with an aerial survey firm, Professional Surveyor, Engineering Surveyor, government department or a firm doing similar work.	10
5	COMPUTER DATA PROCESSING	10
6	ENGINEERING/ CONSTRUCTION SURVEYS	10
TOTAL		80

NB!! All these surveys are to satisfy the required standards of accuracy as set out in the Land Survey Act No. 8 of 1997 and Regulations, or as otherwise specified.

5.2.2. ADDITIONAL TRAINING.

A maximum of 140 working days in the following types of survey of which not **less** than 10 days nor **more** than 120 days will be acceptable in any four (4) of the following options:

- **Cadastral Surveys** with a Professional Land Surveyor, government department or an organisation doing such work.
- **Control Surveys** with a Professional Surveyor, Engineering Surveyor, a government department or an organisation doing such work.

- **Precise Engineering Surveys** with a Professional Surveyor or Professional Engineer, or Engineering Surveyor, with an engineering or construction company, or local authority, or an organisation doing such work.
- **Topographical Surveys (in addition to 5.2.1 above)** with an aerial survey firm, Professional Surveyor, Engineering Surveyor, government department or a firm doing similar work.
- **Engineering/Construction Surveys (in addition to 5.2.1 above)** with a Professional Surveyor or Professional Engineer, or Engineering Surveyor, with an engineering or construction company, or local authority, or an organisation doing such work.
- **Hydrographic Surveys** with a government department, the Hydrographic Survey of the Navy or any other operation or firm undertaking such work.
- The following should be noted:
 - i. The number of working days quoted for compulsory and additional training includes both office and field work
 - ii. The ratio of office to field work should not exceed 2:1 and should include calculations, draughting and normal administrative operations.
 - iii. A detailed day to day diary of all survey work undertaken during the training period shall be kept.
 - iv. Experience in the various fields of survey shall not be one-sided and must include adequate and varied training meeting the requirements above.

5.3 In the case of "other" qualifications, approved by the Council, where the work integrated learning (WIL) component does not meet the above requirements and a training certificate is therefore not issued by the Provider of such a qualification, the nature of such training shall be as set out in Paragraphs 5.2.1 and 5.2.2 above, and submitted on the approved schedule – see **ANNEXURE B**. This schedule must be compiled in chronological order and each page must be signed by the mentor, with whom the candidate has trained, as well as the candidate. In addition it may be expected of the candidate to undertake a trial survey and/or undergo a personal oral examination

6. LAW EXAMINATION FOR SURVEY TECHNICIANS

- 6.1 A candidate who wishes to register as Survey Technician must apply to the Registrar to write a Law examination after he/she has completed the compulsory training.
- 6.2 Law examinations are scheduled to take place twice annually, usually **in March and November**.
- 6.3 The candidate will be expected to have a comprehensive knowledge of the laws relating to registration of surveyors. He or she should also be acquainted with certain aspects of related legislation as set out in the list below.
- 6.4 The law examination consists of one or two written papers as outlined below. The pass mark is 65%.

- 6.5 The Registrar will notify the candidate of a pass or failure.
- 6.6 The 2 hours open book paper will consist of questions as outlined in the following schedule:

1. Professional and Technical Surveyors Act 40 of 1984
2. Rules i.t.o. Act No. 40 of 1984, as amended (PLATO Rules)

N.B. Most of the relevant legislation can be down-loaded from the following websites:

www.plato.org.za

www.polity.org.za/govdocs/legislation

Alternatively, copies could be obtained from:

Butterworths Professional Publishers, P O Box 4, Mayville, 4058.

Contact tel. No's:

Johannesburg	011-784-8009
Durban	031-2683111
Cape Town	021-5558900

ANNEXURE A

LETTER HEAD

CERTIFICATE OF EXPERIENTIAL TRAINING

Issued in favour of: (NAME OF APPLICANT)

ID No:

for registration as a Survey Technician as contemplated in Section 22 of Act 40 of 1984.

I, **(NAME)**, in my capacity as (POSITION IN EDUCATIONAL INSTITUTION), and as a
(Registration category and Registration Number) with PLATO

hereby declare that:

(NAME OF APPLICANT)

has had the necessary training as set out in paragraph 5 of the Notes for Guidance for
Survey Technicians.

Dated at (PLACE) on the (DATE)

Signed:

WORK INTEGRATED LEARNING FOR SURVEY TECHNICIANS (ENGINEERING)

NAME (Block Letters).....

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DATE	TASK DESCRIPTION	COMPULSORY TRAINING												ADDITIONAL TRAINING								
		Triangu- ation/GPS		Levelling Spirit/Trig		Traversing		Computer Data Processing		Topo/ Photo Surveys		Eng/ Const Surveys		Cadastral Surveys		Control Surveys		Precise Eng Surveys		Other (Specify)		
		Field	OFF	Field	OFF	Field	OFF	Field	OFF	Field	OFF	Field	OFF	Field	OFF	Field	OFF	Field	OFF	Field	OFF	
	Brought Forward																					
	TOTALS																					

Each page must be signed by the Supervisor(s) and the candidate OFF - Office (includes calculations, draughting and admin work)

Supervisor signature:

Date:

Print name:.....

PLATO registration:

Candidate signature:

Date: