

NOTES FOR GUIDANCE FOR REGISTRATION AS A GEOGRAPHICAL INFORMATION SCIENCE (GISc) TECHNICIAN

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1 INTRODUCTION

These notes, which have been approved by the South African Council for Professional and Technical Surveyors (PLATO), now replaced by the South African Geomatics Council in terms of Act 19 of 2013, have been compiled with a view to assist persons who intend qualifying for registration as a GISc Technician in terms of Section 13 of the Geomatics Profession Act, 19 of 2013.

Adherence to the requirements as set out below, will assist materially in avoiding unnecessary delays.

1.1 Definitions

The “Council” means the South African Geomatics Council established in terms of Act 19 of 2013, or such agent acting on its behalf.

“GISc” Geographical Information Science refers to the science and technology of collection, measuring, processing, analysing, displaying interpreting, disseminating, utilising, evaluating and managing geographically related and spatially referenced information.

“Mentor” refers to a practising, registered Professional GISc Practitioner or Technologist GISc Practitioner who act as guide and advisor to young entrants to the profession.

2 STATUTORY REQUIREMENTS

An applicant who wishes to register as a Geomatics Technician should normally first register in terms of Section 13 of the Act as a Candidate Geomatics Practitioner. A candidate may, after obtaining a qualification approved by Council, apply for registration as a Geomatics Technician subject to the requirements of Section 13 of the Act.

A candidate who wishes to qualify for registration as a Geomatics Technician and who will be entitled to carry on his/her calling under the personal supervision of a Professional GISc Practitioner, GISc Technologist or other suitably qualified person, shall undergo work integrated learning (WIL) as set out in Paragraph 3 and carry out a practical test as determined by the Council.

An applicant who wishes to qualify for registration as a GISc Technician and who has undergone WIL contemplated in Paragraphs 3 and 4 must submit an application to the Council in terms of Paragraph 5. Where it is not possible to obtain certificates of employment or submit exact schedules of the WIL an affidavit detailing all such training and experience, may be acceptable.

3 WORK INTEGRATED LEARNING

3.1 Period of Learning

Period of WIL required in terms of the Rules is 220 working days and the nature of such learning shall be as set out in Paragraph 3.2 and is controlled by the Council. A WIL certificate is required, certified by an approved mentor that the training meet the requirements of the Council. For a qualification issued by an educational institution where the qualification incorporates the prescribed WIL, the educational institution will normally issue a certificate in respect of the WIL, provided the candidate is registered as a Candidate.

In the case of "other" qualifications, approved by the Council, it may be expected of the applicant to undertake a practical test and/or undergo a personal interview.

3.2 Nature of WIL

Learning must be varied covering a wide range of work in GISc, and can also include surveying, remote sensing, land use and environmental studies and other relevant applications of spatial information. Special attention must be given to the latest technologies and applications in GISc. The work must be undertaken under the personal supervision of a Professional GISc Practitioner or GISc Technologist registered in terms of the Act, or such other person whom the Council considers suitable.

3.3 Compulsory Learning

80 Working days in GISc which comprises.

	TYPE OF WORK	WORKING DAYS
i	IT SKILLS: This includes standard operating system skills; working in a networked environment with centralised servers and printers; working with spreadsheet software, GIS software and e-mail software.	10
ii	DATA COLLECTION AND CAPTURE:	15

	This includes digitising from map compilation or ortho-images; data capture from co-ordinates or general plans; metadata capture and maintenance; map projections and re-projections. This may also include field recording of data by direct observation and by annotation of aerial photography and satellite imagery,	
iii	DATA MANIPULATION: This includes data processing; transformations; spatial data cleaning; data editing; attribute data cleaning; basic data classification; capture and metadata maintenance; map projections and re-projections; working with database files; performing queries; data integration merging, splitting and aggregations.	15
iv	REPRODUCTION PROCEDURES: This includes the reproduction of prints by multi-colour printing on different output devices and other methods of output.	5 COMBINE 4 AND 6.
v	SPATIAL MODELLING: This includes working with different data models; feature classifications and definitions, design of symbology types, styles and colour.	20
vi	MAP PRODUCTION: This includes map production and report writing. Both vector and raster data to be included.	15
	TOTAL	80

3.4 Additional Learning

Not less than 140 working days in the following types of work, of which not less than 10 days or more than 100 days in any one category can be included, with the provision that work in at least three of the categories must be included:

- a) IT Skills development (Additional to the above)
- b) Data Collection and Capture and Processing (Additional to the above)
- c) Data Manipulation (Additional to the above)
- d) Spatial Modelling (Additional to the above)
- e) Photogrammetric Compilation
- f) Image Processing
- g) Map Production (Additional to the above)

3.5 The following should be noted:

The number of working days quoted in Paragraphs 3.3 and 3.4 includes both office and field work, of which not more than 10% may be field work.

A detailed day to day diary of all work undertaken during the learning period shall be kept and may be called for by the Council.

Experience in the various fields of work shall not be one-sided and must include adequate training in all aspects of the work.

Where learning in the form of practical experience has been undertaken the provisions of Paragraphs 3.3 and 3.4 shall be used to assess the practical work performed in terms of the Act by an applicant whose qualification has been recognised.

3.6 WIL Schedule

When applying to the Council for registration, the applicant shall supply a WIL and/or Experience Schedule as an extract from the diary and prepared in the form of the attached specimen. The schedule must be compiled in chronological order and each page must be signed by the candidate and the mentor under who's supervision the candidate has learned.

4 LAW EXAMINATION

A candidate for registration as a GISc Technician must apply to the Registrar to write a Law Examination.

Law examinations can be written in most major centres twice a year. Candidates will be notified of the time and venue for each examination accordingly.

The candidate will be expected to have a comprehensive knowledge of the legislation relating to registration of a GISc Technician. The law examination consists of questions on the Geomatics Profession Act (Act No. 19 of 2013), SAGC Code of Conduct, Draft Regulations to the Geomatics Profession Act (2017-05-26)

A pass mark of 65% is required for this paper. The examination is "open book".

The Registrar will notify the candidate of a pass or failure.

5 APPLICATION FOR REGISTRATION

When the candidate has met the requirements set out in Paragraph 3, an application for registration addressed to the Council must be completed. The application must be accompanied by:

- a) An application form and the relevant fee;
- b) The Schedule of WIL referred to in Paragraph 3.6;
- c) A certified copy of his or her applicable qualification/s; and

- d) A Certificate of Employment as prescribed in the Rules. A separate Certificate of Employment is required in respect of each mentor with whom the candidate has served.

“Certified” means certified to be a true copy by a Commissioner of Oaths or a Justice of the Peace.

5.1 Details of Practical test

The practical test may consist of one or more of the following:

- a) Data capture
- b) Data editing
- c) Data manipulation
- d) Map production
- e) Spatial modelling

A full report dealing with all the aspects of the practical test and other relevant information must be submitted.

6 COMPLETION OF REGISTRATION PROCEDURE

Evaluation of the practical test will take place as soon as possible after completion of the work and the applicant will be informed of the time, date and place of an interview, if required. The examining body will certify the acceptance of the practical test if such a test was deemed necessary.

The Registrar will notify the applicant that he or she complies with the requirements of Section 13 of Act No. 19 for 2013 and will request him or her to make an oath or affirmation in relation to his or her calling. The relevant registration fees will also be required.

When these formalities have been completed the applicant will be registered as a GISc Technician with the Council.

April 2019

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