

## **Career Profile: Agricultural Technician**

Agricultural technicians assist agricultural scientists in their work to improve the productivity, safety and profitability of various farming methods and to ensure that this happens without damage to the natural environment. Technicians can specialize in several distinct areas, namely: investigation of the natural resources of an area; work with farming communities and respond to the extension needs of farmers; or carry out research into agriculture related areas such as agricultural microbiology, zoology, veterinary science, food technology, and soil science.

- What you are expected to do will be influenced by the specialization in which you are working. Here are some ideas of the kind of work that technicians do. It may help you to decide in which area you want to specialize.
- If you want to focus on the natural resources of a region, you will help an agricultural resource officer to classify, describe and plot a map of a region's natural resources. Keen observation of detail and an ability to describe and accurately record your findings will be important.
- If you are interested in dealing with people, extension work with an extension officer will probably appeal more to you. The work will involve contact with farmers and the community, becoming familiar with the area and the challenges facing each of them. The more detailed the information you can build up about them and the quality of communication you establish with them, the more useful your contribution can be. A reputation as a knowledgeable technician who is also a good listener can be invaluable. You can also play an extremely useful role in organizing the gathering and farmers' day arranged to promote development. You could serve as technical adviser to soil and water conservation committees and, for example, may suggest terracing land in the event of erosion, or growing hedges to act as windbreaks. You could assist veterinary surgeons and guide farmers in the treatment of disease and the general handling of animals.
- You may be more interested in research, curious about how things work, keen to experiment and also aware of the discipline required in carrying out research. There are a number of possible areas for research, e.g. botany, agricultural microbiology, zoology, veterinary science, food technology, and soil science. Crop science investigation can lead to identification of field crop problems and development of improved growing methods to obtain higher yields or better quality.

The focus areas in which technicians work may be distinct, but in all areas technicians get involved in research activities. They work with farming communities to collect relevant information which is analyzed and which will inform and promote best farming practice.

## Education Requirements

### National Senior Certificate (NSC)

For a career as an agricultural technician students are advised to select Mathematics, Agricultural and Physical Science and to add to this a selection from the designated subjects. These are subjects that are particularly suitable for tertiary study.

Students who study at an FET College must ensure that they take the appropriate subjects that will enable them to continue their studies at a University of Technology

### National Diploma / BTech

The National Diploma is a three year course which includes gaining guided practical experience. The diploma is a pre-requisite for admission to a Bachelor of Technology - BTech.

#### Offered at:

- [North-West University](#) (Faculty of Agriculture, Science & Technology - Mafikeng Campus)
- [Tshwane University of Technology](#) (Faculty of Science)
- [UNISA](#) (College of Agriculture and Environmental Sciences)

**Specializations offered:** There are a number of National Diplomas and BTechs to consider.

## Admission Requirements

As admission requirements vary from one institution to another, find out what the specific requirements are by checking on the website and contacting the university if you have any queries.

## Possible Employers

- [Department of Agriculture](#)<sup>3</sup>
- [Agricultural Research Council \(ARC\)](#)<sup>4</sup>
- [Department of Environmental Affairs and Tourism](#)<sup>5</sup>
- Directorate of Agricultural Development
- [Department of Water Affairs](#)<sup>6</sup>

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<sup>1</sup> <http://www.uniwest.ac.za/faculties/ast/index.html>

<http://www.tut.ac.za/Students/facultiesdepartments/science/departments/Pages/default.aspx>

<sup>2</sup> [http://brochure.unisa.ac.za/brochure/showlist.aspx?d=c\\_5](http://brochure.unisa.ac.za/brochure/showlist.aspx?d=c_5)

<sup>3</sup> <http://www.nda.agric.za/>

<sup>4</sup> <http://www.arc.agric.za/>

<sup>5</sup> <http://www.environment.gov.za/>

- Veterinary and botanical laboratories
- Various research stations

## Find out more

Find out more about agricultural technician bursaries and jobs:

- [A booklet on Careers in the Agricultural Sector<sup>7</sup>](#) which identifies particularly scarce skills in agriculture.
- [The story of the honey badger<sup>8</sup>](#) in the March 2003 issue of Science in Africa , illustrates how the technician's focus areas can influence each other.
- [An article about African fruits<sup>9</sup>](#) that could help to alleviate malnutrition, need to be researched to learn more about them and to investigate possible cultivation by farmers. The article is the third in a series published over a number of years.

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<sup>6</sup> <http://www.dwaf.gov.za/>

<sup>7</sup> <http://www.nda.agric.za/docs/ET/careers.pdf>

<sup>8</sup> <http://www.scienceinafrica.co.za/2003/march/badger.htm>

<sup>9</sup> <http://www.scienceinafrica.co.za/2008/february/africanfruits.htm>

## Are you suited to this career?

This quick quiz can help you to identify whether you are suited for this occupation. The questions are based on interests, characteristics and values typical of people who work as technicians.

Quiz	Yes	No
Are you good at Mathematics and Science?		
Are you curious and creative?		
Do you enjoy practical tasks?		
Do you approach tasks in an orderly and systematic way?		
Are you an accurate observer?		
Are you able to work well with other people?		
Are you able to solve problems?		
Do you enjoy working out of doors?		
Can you communicate clearly both orally and in writing?		
Do you have good health and physical stamina?		

If you have mainly yes answers it may be an indication that this is an occupation to consider.