



Career Focus - AGRICULTURAL TECHNICIAN

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Dear students

In this edition we will focus on becoming an Agricultural Technician. You will learn more about the career, the requirements and the type of Agricultural technicians.

“Imagine standing in the middle of a large tomato field on a crisp spring day, rows and rows of bright green vines stretching dozens of meters on all sides. You are an agriculture technician for this district and you are here to examine the crop for signs of pests. A large part of your job each spring and summer is to examine fields like this one to determine what types of weeds and insects are present in each field. In doing so, you and your team can advise farmers on the exact type of pesticide they should be using on their fields, as well as the proper dosage. Not only does this save money for the farmers, you are also contributing to sustainable agriculture practices. By ensuring only the necessary pesticides are used in the proper dosages, you help to eliminate overuse and reduce the risk of soil and water contamination and the growth of resistant species. As one of the district's agriculture technicians, you are very familiar with the different crops grown in the area and you know what to look for when inspecting for pests. Conditions this spring have been ideal for infestations of spider mites, and you've found evidence of the tiny creatures in the other three tomato fields you have visited this week. You start your inspection by looking for signs of mites with your magnifying glass, taking careful notes of what you see. In addition to the mites, you look for other common pests, such as worms and aphids, and different weeds that might be growing in the field. You won't be checking every tomato plant today, but rather a random sampling of plants at various locations within the field. You will gather data on the weed and insect species you see and take this information to the district's agronomist. You will then discuss the findings with the agronomist, and together you will prepare a list of recommendations for the farmer, advising on the proper insecticide to eliminate the spider mites and the proper herbicide to control the weeds.”

- Martina

WHAT IS AN AGRICULTURAL TECHNICIAN ?

Agricultural technicians assist the agriculturists in their work and help with the collection of information. They also give practical advice and information to the farming industry.

Agricultural technicians assist agriculturists and farmers with a variety of tasks related to different aspects of agriculture. These include planning, research and the application of agricultural knowledge. They help farmers to make the best use of their land without damaging it and may suggest terracing land in the event of erosion or growing hedges to act as windbreaks.

They serve as technical advisers on soil and water conservation committees. They assist veterinary surgeons and farmers in the treatment of diseases and the general handling of animals. They also instruct on the classification and grading of skins, wool, and mohair.

Some engineering technicians, namely civil, mechanical, electrical/electronic and civil agricultural engineering technicians, are also involved in the agricultural industry. They use their knowledge of engineering to solve problems with regard to irrigation schemes, soil conservation, agricultural structures, agricultural mechanization and the use of electronics and electricity.

REQUIREMENTS

Secondary Education

Possession of at least a **HIGCSE/NSSCH** or outstanding **IGCSE/NSSCO** Grade 12 or equivalent qualification is required to enrol for studies at South African technikons. For studies at **UNAM** at least a C-symbol on IGCSE/NSSCO, or equivalent, is required in Biology and Mathematics, and not less than a D-symbol in Chemistry or Physical Science as well as a minimum of 25 points on the UNAM point evaluation scale.

For studies at NUST (Polytech), candidates must have passed at least five subjects of HIGCSE/NSSCH/IGCSE/NSSCO level and have obtained a total score of at least 25 points on the NUST evaluation scale. For studies at Namibian Agricultural Colleges (e.g. Neudamm, Ogongo, etc.) students should be in possession of an IGCSE/NSSCO Grade 12, or equivalent qualification, with passes in English, Mathematics and a Science subject

Compulsory subject

Mathematics and Physical Science on HIGCSE/NSSCH level (South Africa)

Biology, Mathematics and Chemistry or Physical Science (UNAM)

Biology or a Biology-related subject (Polytechnic of Namibia)

English, Mathematics and one Science subject (Agricultural Colleges - Namibia)

Tertiary Education

UNAM offers a four-year **B. Sc.** degree in Agriculture with specialisation fields. To become an Agricultural Resource Technician or an Agricultural Extension Technician, the minimum requirement is a **N. Dip.: Agriculture** (Resource Utilisation) offered at the South African Technikons of Mangosuthu and Pretoria. To become an Agricultural Research Technician a **N. Dip.: Agricultural Research** can be followed at various technikons in the fields, namely: Nature Conservation, Analytical Chemistry, Animal Production, Veterinary Technology and Food Technology. A **N. Dip.: Agriculture** can be obtained at Agricultural Colleges in Namibia. NUST offers an **N. Dip.: Natural Resources**.

Personality

The prospective agricultural engineering technician should be scientifically and practically inclined and have a lively interest in agriculture.

Work Opportunities

Agricultural Technicians are usually employed by the Ministries of Agriculture, Water and Rural Development, and Environment and Tourism, also by the private sector.



TYPE OF AGRICULTURAL TECHNICIANS

There are three main kinds of agricultural technicians, namely agricultural resource technicians, agricultural extension technicians and agricultural research technicians. Depending on the field chosen, the nature of the work will be as follows:

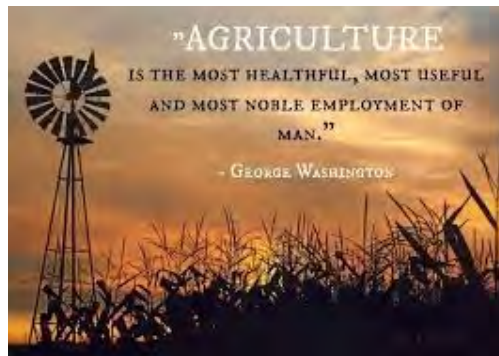
Agricultural resource technician: The agricultural resource technician works together with the agricultural resource officer. They are involved in the classification, description and plotting of a region's natural resources.



Agricultural extension technician: The agricultural extension technician assists the agricultural extension officer. They collect agricultural information to determine the needs for agricultural extension. This information is then used to plan agricultural extension activities. The agricultural extension technician is also involved in the classification of agricultural resources and the planning of farms. They advise farmers on specific farming methods.



Agricultural research technician: The agricultural research technician helps the agricultural researcher with their research but can also undertake their own research project in one of the following fields: Botany, Agricultural Microbiology, Analytical Chemistry, Zoology, Veterinary Science, Food Technology, Agricultural Meteorology and Soil Science.



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References : Namibia Careers , Pace careers, www.eco.ca

Previous newsletters can be found on the TUCSIN
 website:

<http://www.tucsin.org/index.php/en/project/documents-for-students/career-prospect>.