

## **Career Profile: Animal Scientist**

Animal Science deals with the business of producing domestic livestock species. They include beef and dairy cattle, horses, poultry, sheep and pigs. An animal scientist conducts research in the areas of animal selection, breeding, feeding, housing and disease control. S/he applies biological, physical and social science principles to problems linked to livestock production and management, and is involved with foods of animal origin such as meat, dairy products and eggs. Animal scientists assist the agricultural industry to utilize natural resources and conserve the rich biodiversity of animal species in the country.

The nature of your work could vary a lot. Sometimes you will work directly with animals or conduct research in the laboratory, at other times you will need to travel around to consult various groups or give advice to farmers on problems or inform them of new developments.

You can concentrate on one or more focus areas. They include:

- Animal nutrition because some animals need more vitamins, minerals or proteins than others, which affects the type of food they need, so you would study the diet of the animals searching for the best mix of foods to raise healthy animals.
- Animal production and environmental conditions.
- Breeding to introduce new characteristics into animals, e.g. to breed chickens that lay more eggs.
- Health maintenance of animals and disease control.
- Meat processing. Monitor the quality of processing meat products to ensure their quality.
- Cost reduction efforts in raising animals and processing animal products.
- Provide information to assist with marketing and distribution.
- Lecture at agricultural colleges or university.

## **Education Requirements**

### **National Senior Certificate (NSC)**

For a career in animal science students are advised to select Biology, Mathematics, and Physical Science and to add to this a selection from the designated subjects. These are subjects that are particularly suitable for tertiary study.

## Bachelor Degree

**Bachelor of Science in Agriculture – BSc (Agric)** (4 years) - A four year degree programme that focuses on developing knowledge and skills for entry into careers in the field of animal science.

**Bachelor of Science in Animal Science - BSc (Animal Science)** (3 years)

**Bachelor of Agriculture Administration – BAgric (Admin) with Animal Production as a major** (3 years)

### Offered at:

- [North-West University](#)<sup>1</sup> (Faculty of Agriculture, Science & Technology - Mafikeng Campus)
- [University of Limpopo](#)<sup>2</sup> (SAES Animal Production)
- [University of Pretoria](#)<sup>3</sup> (Department of Animal and Wildlife Sciences)
- [University of Venda](#)<sup>4</sup> (Animal Science)

### Specializations:

#### [North-West University \(Mafikeng Campus\)](#)

BSc (Agric) Animal Health (4 years)

#### [University of Limpopo](#)

BSc (Agric) with Animal Production as a major (4 years), BAgric Admin with Animal Production as a major (3 years)

**Areas of specialization within Animal Production include:** Animal Breeding, Animal Nutrition, Animal Anatomy and Physiology, Animal Management

#### [University of Pretoria](#)

BSc (Animal Science) - A 3 year degree, similar in the first 2 years to the BSc (Agric) degree. In the third year there is a focus on applied areas such as animal nutrition, physiology and animal breeding

## National Diploma / BTech

Students who prefer a more practical approach can enrol for a Bachelor of Technology (BTech). [Tshwane University of Technology](#)<sup>5</sup> offers a BTech in Animal Production.

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

<sup>2</sup> [http://www.ul.ac.za/index.php?Entity=agri\\_ani\\_prod](http://www.ul.ac.za/index.php?Entity=agri_ani_prod)

<sup>3</sup> <http://web.up.ac.za/default.asp?ipkCategoryID=2353&sub=1&parentid=2053&subid=2352&ipklookid=11&language=0>

<sup>4</sup> [http://www.univen.ac.za/agriculture/dep\\_agri\\_animal\\_science.html](http://www.univen.ac.za/agriculture/dep_agri_animal_science.html)

<sup>5</sup> [http://www.tut.ac.za/Students/facultiesdepartments/science/departments/Documents/Brochure\\_Animal%20Science.pdf](http://www.tut.ac.za/Students/facultiesdepartments/science/departments/Documents/Brochure_Animal%20Science.pdf)

## 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

- Research organisations
- [Agricultural Research Council\(ARC\)](#)<sup>6</sup>
- [CSIR](#)<sup>7</sup>
- Companies involved in farming
- Manufacturing industries
- The Department of Agriculture
- Agricultural colleges and universities
- Agricultural advisors
- Livestock industry

## Find out more

Find out more about animal scientists, careers, bursaries and jobs:

- [South African Society for Animal Science](#)<sup>8</sup> (400 members)

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<sup>6</sup> <http://www.arc.agric.za/>

<sup>7</sup> <http://www.csir.co.za/>

<sup>8</sup> <http://www.sasas.co.za/>

## 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 animal scientists.

Quiz	Yes	No
Are you curious asking why and how things work?		
Do you enjoy outdoor work?		
Are you imaginative?		
Do you like animals?		
Do you approach tasks systematically?		
Do you enjoy science and find it interesting?		
Can you communicate easily and clearly both verbally and in writing?		
Are you able to work well both independently and as a member of a group?		
Do you have good health and physical stamina?		
Are you interested in research?		

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