



# FACULTY OF NATURAL AND AGRICULTURAL SCIENCES

# TWENTY 20

## UNDERGRADUATE PROGRAMMES

# UNIVERSITY OF THE FREE STATE

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*Inspiring excellence. Transforming lives.  
Inspireer uitnemendheid. Verander lewens.*

**Kovsie  
2B**

UNIVERSITY OF THE  
FREE STATE  
UNIVERSITEIT VAN DIE  
VRYSTAAT  
YUNIBESITHI YA  
FREISTATA



**UFS·UV**

STUDENT RECRUITMENT SERVICES  
STUDENTEWERWINGSDIENSTE

**GENERAL REGULATIONS:** This information should be used in addition to the Calendar of the Faculty of Natural and Agricultural Sciences.

- Only the curriculum of the first academic year is shown.
- During the orientation week at the beginning of the academic year, the programme directors will discuss curriculum compositions with students to clear up any uncertainties. It is VERY important that first-year students attend this orientation.

**THIS FACULTY IS THE RIGHT CHOICE:**

- Market-orientated programmes designed for a number of job opportunities.
- Quality control to ensure that your degree is in demand.
- A unique faculty with a large variety of disciplines.
- Postgraduate programmes designed for easy access to advanced degrees.
- Research of high quality, which is a prerequisite for quality teaching.
- Contact teaching is in English.
- Our students are our important clients.
- We proudly offer programmes on all three campuses, i.e. South Campus (SC), Bloemfontein Campus (BC), and Qwaqwa Campus (QC).



We are **THOUGHT LEADERS**



We actively embrace a culture of **CARE and KINDNESS**



We celebrate **DIVERSITY**



We are **FORWARD-THINKING**, taking on the challenges of the future now



Our teaching and social environments are **SECURE AND CONFINED** to one campus space



We create a space where everyone feels a **SENSE OF BELONGING**

Scan the QR code to find out more about our Faculty!



# WELCOME

Welcome to the Faculty of Natural and Agricultural Sciences, where our motto 'no substitute for excellence' drives our academic endeavours. The faculty provides opportunities for further study, research, and scholarly community engagement in diverse disciplines spanning the natural, agricultural, and building sciences.

The faculty has three broad areas of training and research:

- **Agricultural Sciences** - The choice of Agricultural Science degrees comprises disciplines such as Animal Science, Agrometeorology, Agronomy, Grassland Sciences, Soil Science, Agricultural Economics, Plant Breeding, and Sustainable Agriculture. The UFS is located in the heart of the food basket of South Africa – the agricultural hub. Our wide variety of agricultural programmes reflects the role of the UFS in creating sustainable food production and food security for our country.
- **Natural Sciences** - Natural Science degrees are offered in disciplines such as Biology, Mathematics, Chemical and Physical Sciences, Geosciences, Computer Science, as well as Consumer Sciences.
- **Building Sciences** - In the Building Sciences you can do Quantity Surveying, Construction Management and Architecture.

Our faculty is a vibrant place that attracts both national and international students as a result of its stimulating curriculum, and to which scholars are lured because of our exciting research agenda. We are an engaged faculty, whose interactions with its community is integrated with research and teaching.

Visit the webpages of our departments and centres to see which study opportunities are available in the Natural, Agricultural, and Building Sciences.

WELCOME TO THE FACULTY

**DEAN: PROF DANIE VERMEULEN**

# APPLICATION AND ADMISSION TO STUDY AT THE UFS



Remember to write the NBTs before the end of 2019.

## HOW DO YOU APPLY?

**ONLINE APPLICATION:** Go to [www.ufs.ac.za](http://www.ufs.ac.za). Follow the link <https://apply.ufs.ac.za/> – online application. Proceed through all the steps and submit your electronic application. **Upload copies of the following in PDF or JPEG format when you apply for undergraduate studies:**

- Your ID or passport
- Your parent's ID or passport if you are younger than 18 years
- Your Grade 11 final results with the school's stamp
- Your Grade 12 June results with the school's stamp as soon as it is available. Email the results to [studentadmin@ufs.ac.za](mailto:studentadmin@ufs.ac.za), especially if you have applied for a selection programme
- Your academic record, only if you are a current student at another institution of higher learning
- USAf accreditation from the examination board for South African universities. Apply to [mb.usaf.ac.za](http://mb.usaf.ac.za) for conditional exemption, foreign conditional exemption, or mature age conditional exemption.

The online application is quick and easy – no hassle, no fuss! It has a modern design and is mobile and tablet-friendly. You can apply using any device. No selection forms need to be attached, unless requested otherwise. You can expect a quicker response time if you apply online.

**HARD COPY APPLICATION:** Go to [www.ufs.ac.za](http://www.ufs.ac.za). Follow the link 'how to apply' and download the hard copy application. Complete and sign the application, and mail it with all the relevant certified documentation to: The Application Office, PO Box 339, Bloemfontein 9300.

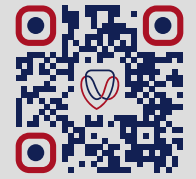
**Remember to include copies of:**

- Your ID or passport
- Your parent's ID or passport if you are younger than 18 years
- Your Grade 11 final results
- Your Grade 12 June results with the school's stamp as soon as it is available. Email the results to [studentadmin@ufs.ac.za](mailto:studentadmin@ufs.ac.za), especially if you have applied for a selection programme
- Your academic record, only if you are a current student at another institution of higher learning
- USAf accreditation from the examination board for South African universities. Apply to [mb.usaf.ac.za](http://mb.usaf.ac.za) for conditional exemption, foreign conditional exemption, or mature age conditional exemption.

For assistance, contact +27 51 401 9666 or [studentadmin@ufs.ac.za](mailto:studentadmin@ufs.ac.za)

Application to study at the UFS is **FREE**

You can apply either **online** or in hard copy.



START YOUR ONLINE  
APPLICATION BY SCANNING  
THE ABOVE QR-CODE.

## IMPORTANT DATES

### PROGRAMMES FOR WHICH APPLICATIONS OPEN

**1 April 2019** – Applications to study any undergraduate programme offered on the Bloemfontein and Qwaqwa Campuses in 2020

**1 September 2019** – Applications to study any University Access Programme (UAP) offered on the South Campus in 2020

### PROGRAMMES FOR WHICH APPLICATIONS CLOSE

**31 July 2019** – Architecture | Quantity Surveying | Construction Management

**31 August 2019** – International undergraduate applications

**30 September 2019** – Geology | Forensic Sciences | All non-selection programmes

**30 November 2019** – All University Access Programmes on the South Campus

## CONFIDENTIALITY CLAUSE

The UFS confirms that all personal information provided in your application form will be treated confidentially and will not be sold to a third party or used for commercial or related purposes. The UFS further confirms that your personal information will only be used for purposes relating to your potential relationship with the UFS as a student, including but not limited to the processing of your application to study at the UFS, effecting registration at the UFS, and for any communication purposes related to your application and/or registration to study at the UFS.

## ADMISSION

Academic excellence is what the UFS is about – the higher your AP score, the better your chances of being chosen and finally admitted to study. Meeting the minimum admission requirements for your chosen/intended programme of study, does not guarantee selection and admission as all programmes have a limited number of spaces available. Applicants with the highest AP scores are chosen first and the admission continues until all spaces have been filled. If you do not meet the minimum admission requirements for your intended/chosen programme of study, you will not be selected. Consult the Faculty-specific admission requirements for all the programmes you qualify for and apply for the two programmes that best fit your personality, purpose and passion. Due to limited spaces available, it is advised that prospective students maintain an AP score of at least 32 (besides other admission requirements) to be able to gain entrance into non-selection programmes. Students need to pass modules in the first semester of study according to the faculty rules and regulations in order to be able to continue with studies in the second semester.

### IMPORTANT INFORMATION:

- The UFS reserves the right to change the minimum requirements of each programme or any other information without notifying you.
- There are specific admission requirements that you should meet if you want to study at any South African university. If you finished school in or after 2008, and have a National Senior Certificate (NSC), you need the following to apply for admission to a Bachelor's degree at any South African university:
- Four (4) of the seven (7) subjects included in your NSC subject package should be from the school subject list
- A performance level of at least 4 (50%) in each of these four (4) subjects

### Admission to study at the UFS is furthermore dependent on the following:

- Your application meets all the minimum requirements for the programme
- The programme must have available space and capacity to admit students
- You have to submit valid school results with your application
- All admission requirements apply to first-year students in 2020.
- The UFS reserves the right to change the minimum requirements of each programme without notifying you.
- A minimum admission point (AP) of 30 is required, unless stated otherwise.
- Language of instruction on level 4 (50%).
- A minimum performance level of 5 (60%) in Mathematics. Depending on the programme you are interested in, a higher performance level in Mathematics will be required.
- As from 2020, all programmes that require a level 4 (50%) for Physical Sciences will be changed to level 5 (60%).
- Both Life Sciences and Physical Science will be required for admission to most BSc programmes; however, there are programmes where you require either Life Sciences or Physical Sciences. Consult the Faculty Rulebook for more information.
- Participation in the NBT tests for Language and Mathematics is required.

The admission requirements are a broad indication for entrance into the Faculty of Natural and Agricultural Sciences. Make sure you know the admission requirements of the programme you are interested in.

**Note: It is very important that you study the Faculty Rulebook at [www.ufs.ac.za](http://www.ufs.ac.za), or contact the specific programme director or the faculty manager, as any one of the minimum admission requirements of any programme can be changed without prior notification.**

An admission point (AP) consisting of seven levels is used. Points will be awarded for six academic modules.

**Note: No points will be awarded for achievement levels lower than 30%:**

%	7 (90–100%)	7 (80–89%)	6 (70–79%)	5 (60–69%)	4 (50–59%)	3 (40–49%)	2 (30–39%)
AP	8	7	6	5	4	3	2

One point is awarded for Life Orientation (LO) from achievement level 5 (60%) or higher.

### DISCLAIMER – IMPORTANT NOTICE

Kindly take note that this faculty programme booklet is aimed at prospective undergraduate students wishing to apply for a place at the University of the Free State (“UFS”) and whom wish to start their studies at the UFS during the 2020 academic year. The faculty programme booklet accordingly describes and outlines the programmes and services offered by the UFS, as well as the minimum admission requirements for each programme, but must be read with the policies, rules and regulations of the UFS (as may be amended from time to time). In order to be considered for selection for a programme, an applicant is required to comply with the programme's minimum admission criteria in respect of the total AP score, subject specific requirements (as determined per programme), and faculty/department's specific requirements. However, due to limited space, fulfilling all the minimum entry (admission) requirements does not guarantee acceptance to study at the UFS, or entrance into any particular programme offered by the UFS. The UFS makes every effort to ensure that the information provided in this faculty programme booklet is accurate and up-to-date at the time of going to press. However, it may be necessary for the UFS to make some changes to the information presented in the faculty programme booklet following publication – for example, where it is necessary to reflect changes in policy, practice or theory, or if an accrediting body necessitates requirements to be amended. Furthermore, certain programmes may only be offered if there is a sufficient number of applicants. The UFS undertakes to take all reasonable steps to provide the services (including, but not limited to, presentation of the programmes) described in the faculty programme booklet. It does not, however guarantee the provision of such services or the presentation of any or all programmes described herein. Should circumstances beyond the control of the UFS interfere with its ability to provide the services or presentation of any programme described herein, the UFS undertakes to use all reasonable steps to minimise any disruption to the services. Furthermore, the UFS reserves its right to make amendments to admission requirements if and when necessary. It reserves the right to withdraw, wholly or in part, the delivery of programmes. Applicants for, and students in programmes affected, will be informed in advance of the commencement of their studies for the academic year concerned.

## FACULTY-SPECIFIC UNDERGRADUATE PROGRAMMES AND REQUIREMENTS

### ABBREVIATIONS

From this point forward, we will use these abbreviations instead of the full terms:

<b>NSC:</b>	National Senior Certificate	<b>AS:</b>	Agricultural Sciences
<b>AP:</b>	Admission point	<b>NBT:</b>	Compulsory National Benchmark Tests
<b>APC:</b>	Academic Plan Code	<b>AL:</b>	Academic Literacy Test (NBT)
<b>LOI:</b>	Language of Instruction	<b>QL:</b>	Quantitative Literacy Test (NBT)
<b>MATHS:</b>	Mathematics	<b>MT:</b>	Mathematics Test (NBT)
<b>MATHS LIT:</b>	Mathematical Literacy	<b>BC:</b>	Bloemfontein Campus
<b>PS:</b>	Physical Sciences	<b>QC:</b>	Qwaqwa Campus
<b>LS:</b>	Life Sciences	<b>SC:</b>	South Campus

ISN'T IT AMAZING HOW WORKING WITH THE SMALLEST ELEMENTS IN THE UNIVERSE, WE AT THE FACULTY OF NATURAL AND AGRICULTURAL SCIENCES CAN MAKE YOU UNDERSTAND THE BIGGER PICTURE IN THE AGRICULTURAL, NATURAL, AND BUILDING SCIENCES?

## GENERAL ENQUIRIES:

**Webpage:** [www.ufs.ac.za/natagri](http://www.ufs.ac.za/natagri) | [natagri@ufs.ac.za](mailto:natagri@ufs.ac.za)

**Faculty address:** Dean of the Faculty of Natural and Agricultural Sciences  
University of the Free State | PO Box 339 | Bloemfontein | 9300

**Faculty manager:** +27 51 401 3199 | Dean: +27 51 401 2322 | Marketing manager: +27 51 401 2531

## AGRICULTURAL SCIENCES

In this programme, we offer the following qualifications: a three-year Bachelor of Agriculture degree (BAgric), a three-year Bachelor of Science degree in Agricultural Economics, and a four-year Bachelor of Agricultural Science degree (BScAgric).

Apart from this, we also offer University Preparation and Access (UPP) Programmes for BAgric/BScAgric on the South Campus. If the admission requirements for the BAgric or BScAgric programmes on the Bloemfontein Campus are not met, students can also enrol for these programmes on the South Campus; if students pass all the subjects offered, they can continue on the Bloemfontein Campus. [Please check the admission requirements for these programmes.] For more information regarding this, please contact the programme director on 051 401 2934.

## UNIVERSITY ACCESS PROGRAMMES

### DURATION OF STUDIES: FOUR YEARS

**Enquiries:** UAP and Extended Curriculum Programmes: Elzmarie Oosthuizen: +27 51 401 2934 | [oosthuizenem@ufs.ac.za](mailto:oosthuizenem@ufs.ac.za) or Elrich Jacobs: +27 51 401 3726 | [jacobses@ufs.ac.za](mailto:jacobses@ufs.ac.za)

### The following programmes are presented on the South Campus:

If you are not successful in gaining admission to the university, you may take one of the following Agricultural Programmes to obtain access:

1. University Access Programme (UAP) for BAgric
2. BAgric Extended Curriculum Programme (4 years)
3. BScAgric Extended Curriculum Programme (5 years)

This programme extends over one year and gives the successful student a chance to enter into the BAgric/BScAgric programmes on the Bloemfontein Campus. The programme provides students an opportunity to enjoy generally formative and vocationally-directed studies at various further- and higher education institutions after the successful completion of a bridging year.

### THE FOLLOWING UPP IN AGRICULTURE ARE PRESENTED ON THE SOUTH CAMPUS:

PROGRAMME DESCRIPTION			MINIMUM ADMISSION REQUIREMENTS				
Programme	Academic Plan Code	AP	Language of instruction	Maths	Maths Lit	NBT	Campus
UAP in Agricultural Sciences for BAgric*	50001	20	3 (40%)	2 (30%)	5 (60%)	N/A	SC
*For the UAP in Agricultural Sciences for BAgric, either Mathematics or Mathematical Literacy will be accepted. However, if you have Mathematical Literacy, your AP score must be 24 or higher. This programme gives you access to the BAgric Extended Curriculum Programme, which is a four-year programme.							
BAgric Extended Curriculum Programme	BC5300E1	22	4 (50%)	2 (30%)	5 (60%)	N/A	SC
For the BAgric Extended Curriculum Programme, either Mathematics, Mathematical Literacy or Technical Mathematics will be accepted. However, if you have Mathematical Literacy/Technical Mathematics, your AP score must be 24 or higher. Technical Mathematics need to be on level 3 (40%). The BAgric Extended Curriculum Programme is a four-year programme.							

**Note:** You will attend the first year of study on the South Campus and proceed in the second year to the Bloemfontein Campus, IF you meet the required performance levels as set out in the faculty regulations. It is important to consult the Faculty Yearbook.

## BAgric DEGREES

### DURATION OF STUDIES: THREE YEARS

The objective of the degree is the training of students who will be able to apply agricultural knowledge practically at farm level, as well as in agriculturally-related organisations. The BAgric qualification will allow individuals to apply their knowledge in the fields of resource utilisation, agricultural production, processing, management, and communication.

### Careers/fields of study:

- Agricultural adviser, extension and training officer.
- Managerial positions in a wide range of agri-businesses and farmer enterprises.
- Representatives in agrochemical (pharmaceuticals, fertilisers, pesticides, etc.) and animal feed companies.

### THE FOLLOWING PROGRAMMES IN AGRICULTURE ARE PRESENTED ON THE BLOEMFONTEIN CAMPUS:

Due to limited spaces available, it is advised that prospective students maintain an AP score of at least 32 (besides other admission requirements) to be able to gain entrance into non-selection programmes. Students need to pass modules in the first semester of study according to the faculty rules and regulations in order to be able to continue with studies in the second semester.

**Enquiries:** All Agricultural programmes.

**Soil, Crop and Climate Sciences:** Dr Elmarie van der Watt: +27 51 401 2713 | [vdwatte@ufs.ac.za](mailto:vdwatte@ufs.ac.za)

**Animal, Wildlife and Grassland Sciences:** Dr Mike Fair: +27 51 401 9056 | [fairmd@ufs.ac.za](mailto:fairmd@ufs.ac.za)

**Agricultural Economics:** Dr Janus Henning: +27 51 401 9713 | [henningjif@ufs.ac.za](mailto:henningjif@ufs.ac.za)

**Agricultural Extension:** Dr Johan van Niekerk: +27 51 401 3765 | [vniekerkja@ufs.ac.za](mailto:vniekerkja@ufs.ac.za)

**Food Sciences:** Prof Koos Albertyn: +27 51 401 2223 | [albertynj@ufs.ac.za](mailto:albertynj@ufs.ac.za) or

Dr Frans O' Neill: +27 51 401 7553 | [oneillfh@ufs.ac.za](mailto:oneillfh@ufs.ac.za)

## BACHELOR IN AGRICULTURE (BAgric) IN THE FOLLOWING MAJORS:

PROGRAMME DESCRIPTION	MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	NBT	CAMPUS
BAgric majoring in Agricultural Extension	BC530147	30	4 (50%)	3 (40%)	AL, QL, MT	BC
BAgric majoring in Agricultural Extension is a new specialisation programme that develops agricultural extension specialists that could support sustainable agricultural practices, guidance and support to ensure food security and socio-economic development.						
BAgric majoring in Agricultural Management	BC530152	30	4 (50%)	3 (40%)	AL, QL, MT	BC
BAgric majoring in Animal Production Management	BC530101	30	4 (50%)	3 (40%)	AL, QL, MT	BC
BAgric majoring in Crop Production Management	BC530102	30	4 (50%)	3 (40%)	AL, QL, MT	BC
BAgric majoring in Mixed Farming Management	BC530103	30	4 (50%)	3 (40%)	AL, QL, MT	BC
BAgric majoring in Irrigation Management	BC530172	30	4 (50%)	3 (40%)	AL, QL, MT	BC
BAgric majoring in Wildlife Management	BC530190	30	4 (50%)	3 (40%)	AL, QL, MT	BC
For the listed programmes above, Mathematical Literacy on level 7 (80%) will also be accepted IF the AP is 31 or above. (Excluding BAgric majoring in Agricultural Economics)						
BAgric majoring in Agricultural Economics	BC530111	30	4 (50%)	4 (50%)	AL, QL, MT	BC

## BSc AGRICULTURAL ECONOMICS (3 YEARS)

PROGRAMME DESCRIPTION	MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	NBT	Campus
BSc majoring in Agricultural Economics	BC431100	32	4 (50%)	5 (60%)	AL, QL, MT	BC

The learning programme in Agricultural Economics offers only ONE option. It focuses mainly on Agricultural Economics and Statistics as majors. In the first year Mathematics, Statistics, Biology, and Agricultural Economics are compulsory, with a choice between three electives: Soil Science, Animal, Wildlife and Grassland Sciences, and Biology. In the second year Agricultural Economics, Economics, Statistics, and Computer Literacy are compulsory, with a choice between the electives: Agronomy, Soil Science, Animal Science, and Grassland Science. In the third and final year Agricultural Economics and Statistics are compulsory. The electives to choose from are: Agronomy, Animal Science, Soil Science, and Grassland Science.

### Careers/fields of study:

- Animal, Wildlife and Grassland Sciences: animal breeder, animal physiologist, animal nutritionist, grassland scientist, agricultural adviser, private consultant, farmer, academic, teacher, extension officer, and researcher.

- Soil, Crop and Climate Sciences: agronomist, soil scientist, horticulturist, agro-meteorologist, researcher, agricultural adviser, and consultant.
- Plant Sciences: plant pathologist or plant breeder at private or public institutions involved in crop research and development in the agricultural, horticultural, and forestry industries.

## BSc (AGRICULTURE) DEGREES:

### DURATION OF STUDIES: FOUR YEARS, UNLESS INDICATED OTHERWISE

This degree must be considered if you are interested in qualifying as an agricultural scientist who, through research and practically-orientated development, wants to expand your knowledge. There are different learning programmes for the BScAgric degree with combinations between the following fields of specialisation: Agricultural Economics, Agronomy, Agrometeorology, Animal Science, Food Science, Grassland Science, Irrigation Science, Plant Breeding, Plant Pathology, Soil Science, etc. These study fields will enable you to qualify for one of the following careers:

**Careers/fields of study:** Entomologist · Soil Scientist · Agricultural Economist (through BSc Agricultural Economics only) · Agricultural Manager · Plant Breeder · Agro-meteorologist · Animal Physiologist · Plant Pathologist · Animal Nutritionist · Animal Breeder · Grassland Scientist · Food Scientist · Agronomist or Plant Production Specialist · Irrigation Scientist

### The following combinations will be available:

- Learning programmes in the **AGROMETEOROLOGY field of interest offer SIX options** with a combination of Agrometeorology as a major for specialisation in the fourth year and a minor from one of the following: Agronomy, Soil Sciences, Agricultural Economics, Agricultural Engineering, Grassland Sciences or Plant Pathology.
- Learning programmes in the **AGRONOMY field of interest offer EIGHT options** with a combination of Agronomy as a major for specialisation in the fourth year and a minor from: Agrometeorology, Soil Sciences, Agricultural Economics, Animal Sciences, Entomology, Food Sciences, Plant Breeding or Plant Pathology.
- Learning programmes in the **SOIL SCIENCE field of interest offer SIX options** with a combination of Soil Science as a major for specialisation in the fourth year and a minor from: Agronomy, Soil Sciences, Agricultural Economics, Agricultural Engineering, Grassland Sciences or Plant Pathology.
- Learning programmes in the **ANIMAL, WILDLIFE AND GRASSLAND SCIENCES field of interest offers FOUR options** with a combination of either Animal or Wildlife and Grassland Sciences as a major for specialisation in the fourth year and a minor from one of them or from Agricultural Economics and Soil Science until third-year level.
- Learning programmes in the **FOOD SCIENCES field of interest offer FIVE options** with a combination of Food Sciences as a major for specialisation in the fourth year and a minor from: Agronomy, Animal Sciences, Chemistry, Biochemistry, or Microbiology.
- Learning programmes in the **PLANT BREEDING AND PLANT PATHOLOGY field of interest offers FOUR options** with a combination of either Plant Breeding or Plant Pathology as a major for specialisation in the fourth year and a minor from either Plant Breeding or one of the two fields of interest or from Grassland and Agronomy until third-year level.

# BSc (AGRICULTURE)

**VERY IMPORTANT: TWO of either Life Sciences / Agricultural Sciences / Physical Sciences WITH Mathematics, are required for all BSc Agricultural programmes, excluding only BSc Agricultural Economics.**

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS							
Programme	Academic Plan Code	AP	LOI	MATHS	LS	PS	AS	NBT	Campus
BSc (Agriculture) majoring in Animal Sciences with Agricultural Economics	BC541511	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Animal Sciences	BC543615	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Grassland Sciences	BC543644	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Wildlife Production	BC543689	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agrometeorology with Agricultural Economics	BC541211	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agrometeorology with Agronomy	BC541213	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agrometeorology with Grassland Sciences	BC541236	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agrometeorology with Plant Pathology	BC541242	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agrometeorology with Soil Science	BC541244	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agrometeorology with Agricultural Engineering	BC541251	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Agricultural Economics	BC541311	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Agrometeorology	BC541312	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Animal Science	BC541315	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS							
Programme	Academic Plan Code	AP	LOI	MATHS	LS	PS	AS	NBT	Campus
BSc (Agriculture) majoring in Agronomy with Entomology	BC541327	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Food Science	BC541329	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Plant Breeding	BC541341	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Pathology	BC541342	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Agronomy with Soil Science	BC541344	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Soil Science with Agricultural Economics	BC544411	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Soil Science with Agrometeorology	BC544412	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Soil Science with Agronomy	BC544413	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Soil Science with Grassland Science	BC544436	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Soil Science with Plant Pathology	BC544442	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Soil Science with Agricultural Engineering	BC544451	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Plant Breeding with Agronomy	BC544112	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Plant Breeding with Plant Pathology	BC544142	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Agriculture) majoring in Plant Breeding with Grassland Science	BC544144	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS							
Programme	Academic Plan Code	AP	LOI	MATHS	LS	PS	AS	NBT	Campus
BSc (Agriculture) majoring in Plant Pathology with Plant Breeding	BC544241	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

**Very important:** TWO of either Life Sciences / Agricultural Sciences / Physical Sciences WITH Mathematics, are required for all BSc Agricultural programmes, excluding only BSc Agricultural Economics.

## NATURAL SCIENCES

- This information should be used in addition to the Rulebook of the Faculty of Natural and Agricultural Sciences.
- Only the curriculum for the first academic year is shown.
- During the orientation week at the start of the academic year, the programme directors will discuss curriculum compositions with students to clear up any uncertainties.
- Due to limited spaces available, it is advised that prospective students maintain an AP score of at least 32 (besides other admission requirements) to be able to gain entrance into non-selection BSc programmes.
- Students need to pass modules in the first semester of study according to the faculty rules and regulations in order to be able to continue with studies in the second semester.

**In this programme, we offer the following undergraduate qualifications:**

- BACHELOR DEGREES IN:** Agriculture; Consumer Sciences (General and Food); Computer Information Systems.
- BACHELOR OF SCIENCE IN:** Actuarial Sciences, Agrometeorology, Astrophysics, Genetics, Behavioural Genetics, Human Molecular Biology, Biochemistry, Botany, Chemistry, Consumer Science, Entomology, Environmental Rehabilitation, Food Science, Forensic Science, Geography, Geology, Information Technology, Mathematics and Applied Mathematics, Mathematical Statistics, Microbiology, Physics, Plant Breeding, Plant Health Ecology, Plant Pathology, Statistics, Zoology.

Candidates who do not comply with the Faculty of Natural and Agricultural Sciences' entry requirements for mainstream BSc studies, can gain admission to the university through the University Access Programme (UAP) or the BSc Extended Curriculum Programme. The programmes provide students an opportunity to improve their skills and competencies with the aim of gaining access to mainstream studies after successful completion of the first year. These programmes also address, through courses in Skills and Competencies in Lifelong Learning, the student's wider needs with regards to quality of personal life, study and reading skills, self-assertiveness, problem solving, and other generic competencies. Students also attend an academic language course in English to improve reading and writing skills for higher-education purposes. Please check the admission requirements for these programmes. For more information regarding this, please contact the programme director on +27 51 401 2934.

**Enquiries – The following University Access Programme (Natural Sciences) is offered:**

Pieter Bothma: +27 51 505 1381 (Bfn) | bothmapj@ufs.ac.za

Elzmarie Oosthuizen: +27 51 401 2934 (Bfn) | oosthuizenem@ufs.ac.za

Erich Jacobs: +27 51 401 3726 (Bfn) | jacobses@ufs.ac.za

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	SITE
UAP Natural Sciences	40001	20	3 (40%)	3 (40%)	3 (40%)	3 (40%)	N/A	South Campus, Sasolburg, Welkom
Either Life Sciences or Physical Sciences will be accepted.								

## BSc EXTENDED CURRICULUM PROGRAMMES

**The following BSc Extended Curriculum Programmes are presented on the South Campus in Bloemfontein:**

**Enquiries:**

Pieter Bothma: +27 51 505 1381 (Bfn) | bothmapj@ufs.ac.za

Elzmarie Oosthuizen: +27 51 401 2934 (Bfn) | oosthuizenem@ufs.ac.za

Erich Jacobs: +27 51 401 3726 (Bfn) | jacobses@ufs.ac.za

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc Extended Curriculum Programme majoring in Mathematics and Chemistry*	BC4300E1	22	4 (50%)	3 (40%)	3 (40%)	3 (40%)	N/A	South Campus
Either Life Sciences or Physical Sciences are required. Technical Mathematics on level 4 (50%) and Technical Sciences on level 4 (50%) will be accepted.								
BSc Extended Curriculum Programme majoring in Mathematics and Finances	BC4300E2	22	4 (50%)	3 (40%)	N/A	N/A	N/A	South Campus
Technical Mathematics on level 4 (50%) will also be accepted.								

**Note:** You will attend the first year of study on the South Campus and proceed in the second year to the Bloemfontein Campus, IF you achieve the required performance levels as set out in the faculty requirements. It is very important that you consult the Faculty Yearbook.

**The following BSc Extended Curriculum Programmes are presented on the Qwaqwa Campus:**

**Enquiries:** Lea Koenig: +27 58 718 5207 | koenigl@ufs.ac.za



PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc Extended Curriculum Programme majoring in Mathematics and Chemistry	QC4300E1	22	3 (40%)	3 (40%)	3 (40%)	3 (40%)	N/A	QC
Either Life Sciences or Physical Sciences <b>WITH</b> Mathematics are required. Technical Mathematics on level 4 (50%) and Technical Sciences on level 4 (50%) will also be accepted.								
BSc Extended Curriculum Programme majoring in Biology and Geography	QC4300E2	22	3 (40%)	3 (40%)	3 (40%)	3 (40%)	N/A	QC
Either Life Sciences or Physical Sciences <b>WITH</b> Mathematics are required. Technical Mathematics on level 4 (50%) and Technical Sciences on level 4 (50%) will also be accepted.								
BSc Extended Curriculum Programme majoring in Computer Sciences	QC4301E1	22	4 (50%)	3 (40%)	N/A	3 (40%)	N/A	QC
Either Life Sciences or Physical Sciences <b>WITH</b> Mathematics are required. Technical Mathematics on level 4 (50%) and Technical Sciences on level 4 (50%) will also be accepted.								

**Note:** If you do not meet the admission requirements for the three-year BSc programmes, you could be allowed into the BSc Extended Curriculum Programme if you meet the minimum admission requirements.

## BACHELOR OF SCIENCE (BSc)

### DEGREES IN THE FOLLOWING PROGRAMMES:

### LEARNING PROGRAMMES IN BIOLOGICAL SCIENCES

### DURATION OF PROGRAMME: THREE YEARS

**Enquiries:** Programme Directors:

**Genetics, Behavioural Genetics:** Zurika Murray: +27 51 401 2776 | murrayz@ufs.ac.za

**Botany, Plant Breeding, Plant Pathology, Plant Health:** Prof Botma Visser:

+27 51 401 3278 | visserb@ufs.ac.za

**Zoology, Entomology:** Dr Candice Jansen van Rensburg: +27 51 401 9357 | jvrensc@ufs.ac.za

**Biochemistry, Food Science:** Dr Frans O'Neill: +27 51 401 7553 | oneillfh@ufs.ac.za

**Microbiology, Food Science:** Prof Koos Albertyn: +27 51 401 2223 | albertynj@ufs.ac.za

**Forensic Sciences:** Dr Karen Ehlers: +27 51 401 3978 | ehlersk@ufs.ac.za

Learning programmes in the **BIOLOGICAL FIELD OF INTEREST 1 offers SIXTEEN** options with a combination of any two majors, e.g. Biochemistry and Microbiology, Biochemistry and Genetics, Biochemistry and Botany, Biochemistry and Entomology, Biochemistry and Zoology, Microbiology and Genetics, Microbiology and Botany, Microbiology and Entomology, Microbiology and Zoology, or Microbiology and Food Science.

Learning programmes in the **BIOLOGICAL SCIENCES FIELD OF INTEREST 2 offers SEVEN** options with Biochemistry and Food Science, Biochemistry and Statistics, Biochemistry and Physiology, Behavioural Genetics (Genetics and Psychology), Genetics and Physiology, Human Molecular Biology or Forensic Sciences.

Learning programmes in the **BIOLOGICAL SCIENCES FIELD OF INTEREST 3 offers FOUR** options: Plant Health Ecology, Botany and Plant Pathology, Botany and Plant Breeding, and Environmental Rehabilitation with Botany as a major in combination with other modules.

Learning programmes in the **BIOLOGICAL SCIENCES FIELD OF INTEREST 4 offers THREE** options: Biochemistry and Food Science, Biochemistry and Statistics, Biochemistry and Physiology

The following programmes are presented on the Bloemfontein Campus:

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Biochemistry and Botany	BC431920	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Entomology	BC431927	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Food Science	BC431929	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Genetics	BC431931	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Microbiology	BC431939	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Statistics	BC431946	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Zoology	BC431949	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Biochemistry and Physiology	BC431980	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Botany and Entomology	BC432027	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Botany and Genetics	BC432031	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Botany and Microbiology	BC432039	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Botany and Plant Breeding	BC432041	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Botany and Plant Pathology	BC432042	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Botany and Zoology	BC432049	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Plant Health Ecology	BC432182	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Entomology and Genetics	BC432731	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Entomology and Microbiology	BC432739	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Entomology and Zoology	BC432749	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Behavioural Genetics	BC433118	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Genetics and Microbiology	BC433139	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Genetics and Physiology	BC433180	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Genetics and Zoology	BC433149	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Microbiology and Food Sciences	BC433929	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Microbiology and Statistics	BC433946	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Microbiology and Zoology	BC433949	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Rangeland and Wildlife Ecology	BC433689	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

**Note:** Students intending to register for Chemistry as a major, must take note that only a limited number of students are admitted, based on academic excellence.

The following programmes in Biological Sciences are presented on the Qwaqwa Campus:

**Enquiries:** Dr Tom Okello: +27 58 718 5478 | okellotw@ufs.ac.za

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Botany and Life Sciences	QC432065	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC
BSc majoring in Life Sciences	QC436500	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC
BSc majoring in Zoology and Life Sciences	QC434965	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC

#### CAREERS / FIELDS OF STUDY:

**Genetics:** Technicians in agricultural, forestry, seed, pest control, and medical research institutes, as well as forensic institutions (e.g. police services).

- **Plant Sciences:** Careers in the educational, agricultural, environmental, and biotechnological sectors as botanist, plant breeder, plant pathologist, researcher, teacher, environmental consultant, conservationist, laboratory or research assistant, and entrepreneur.
- **Microbial, Biochemical and Food Biotechnology:** Analysts, technicians, researchers, academics, and entrepreneurs in research and development for the production and analysis of vaccines and drugs, as well as diagnostic tests for use in human, animal, and plant health, whether in industry, academia, or research institutes. Laboratory and production assistants and managers working in product development, production, quality and pollution control in the food, medical, and chemical sectors (e.g. breweries, meat, dairy, and grain industries, vaccine, drug, chemicals and paper manufacturing, as well as water purification).
- **Zoology and Entomology:** Laboratory or research assistant, teacher, environmental consultant, conservationist in environmental or agricultural sectors; education and medical institutes or as an entrepreneur.

## BEHAVIOURAL GENETICS (BC433118)

DIFFERS FROM THE ABOVE BIOLOGY PROGRAMMES:  
DURATION OF STUDY: THREE YEARS

**Enquiries:** Mrs Zurika Murray: +27 51 401 2776 | murrayZ@ufs.ac.za

Behavioural Genetics is a combination of Psychology and Genetics. The main purpose of this subject area is to study the interaction between the environment and hereditary behavioural patterns. After completion of this study, the student will have a thorough basic knowledge of Behavioural Genetics. The student will be capable of specialising on postgraduate level (up to PhD) in Behavioural Genetics, Genetics or Psychology. Postgraduate training is essential in order to work as a behavioural geneticist.

**Careers/fields of study:** Technicians in medical research and diagnostic institutes. A postgraduate qualification is highly recommended.

## FORENSIC SCIENCES

DURATION OF STUDY: THREE YEARS

**Enquiries:** Dr Karen Ehlers: +27 51 401 3978 | ehlersk@ufs.ac.za

Admission is subject to selection. This programme focuses on how science can be used to analyse and interpret different crime scenes. This includes Chemistry, Physics, Genetics, and Entomology. After completion of this study, the student will have a thorough basic knowledge of the physical and biological science aspects of Forensic Sciences. The student will be able to specialise on postgraduate level (up to PhD) in Forensic Sciences, Forensic Genetics, Forensic Chemistry, Forensic Entomology, Forensic Physics, Genetics, and Chemistry (depending on final-year majors). This programme is only presented on the Bloemfontein Campus.

**Careers/fields of study:** Technicians and analysts in forensic laboratories. A postgraduate qualification is highly recommended.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Forensic Sciences	BC433031	34	4 (50%)	6 (70%)	6 (70%)	5 (60%)	AL, QL, MT	BC
Admission to BSc majoring in Forensic Sciences is <b>subject to selection</b> . A minimum AP of 34 is required, with a cumulative AP score of at least 17 for Mathematics, Life Sciences, and Physical Sciences. NBT results will be used for selection and admission purposes. No person with a criminal record will be admitted to this programme. Closing date for applications is 30 September 2019.								

## LEARNING PROGRAMMES IN CHEMICAL AND PHYSICAL SCIENCES

DURATION OF STUDY: THREE YEARS

**Enquiries:** Dr Johan Venter: +27 51 401 3336 | venterja@ufs.ac.za

**Learning programmes in Chemical and Physical Sciences offer FIVE main options:**

- Physics and Chemistry
- Physics and Astrophysics
- Physics and Agrometeorology
- Physics and Engineering subjects
- Chemistry in combination with biological subjects as the other majors:
  - Chemistry and Botany
  - Chemistry and Food Sciences
  - Chemistry and Microbiology
  - Chemistry and Biochemistry

In other programmes, Physics can also be taken in combination with Mathematics, Geology, and Computer Science. In similar programmes, Chemistry can be taken in combination with Forensic Science, Mathematics, Geology, and Computer Science.

**Physics:** This learning programme makes provision for the student who is interested in Physics. Careers include working in industry, research laboratories, and teaching at schools or universities. This programme is well suited to careers in many manufacturing industries (mining, agriculture, and metallurgy) or engineering firms concerned with mechanical, civil, telecommunication and/or electronic and electrical activities. Careers in design, energy production, computer sciences, advanced instrumentation development, and modelling are also possible. Postgraduate studies can be pursued in Physics, provided that the necessary prerequisites are met. Combined career directions, for example combinations of Physics and Law (e.g. patent lawyer) or Physics and economic fields (e.g. financial modelling or risk assessment) can also be considered after further studies in these directions.

**Chemistry:** This learning programme makes provision for the student who is interested in Chemistry. Careers include working in industry, research laboratories, and teaching at schools or universities. Postgraduate studies can be pursued in Chemistry, if the prerequisites are met.

**Careers/fields of study:**

- Careers in research laboratories, e.g. CSIR and Sasol; academia, e.g. university lecturing and research; industry, e.g. petrochemical, rubber, manufacturing, paint, food, mining, water purification, etc.
- Careers in research laboratories, e.g. CSIR and Mintek; academia, e.g. university lecturing and research; industry, e.g. manufacturing, energy, nuclear, telecommunications, instrumentation, modelling, Bureau of Standards.

The following programmes are offered on the Bloemfontein Campus:

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Chemistry and Biochemistry	BC432119	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Chemistry and Food Sciences	BC432129	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Chemistry and Microbiology	BC432139	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Chemistry and Physics	BC432140	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Chemistry and Botany	BC432120	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

**Notes:** If Biological subjects are the second major, Life Sciences at level 5 (60%) is required. If you intend to register for Chemistry as a major, take note that only 80 students in the second year and only 60 students in the third year will be admitted, based on academic excellence.

## Astrophysics:

Duration of study: Three years

Enquiries: Dr Johan Venter: +27 51 401 3336 | venterja@ufs.ac.za

In this learning programme, Astrophysics is presented together with Physics on the Bloemfontein Campus. Students who have successfully completed their studies, can pursue postgraduate studies in Physics with Astrophysics modules, which can lead to an MSc and a PhD in Physics, specialising in Astrophysics.

**Careers/fields of study:** Careers in research institutes, e.g. SAAO, SKA, HartRAO, and HMO; academia, e.g. university lecturing and research; space science (satellite applications) or public education centres, e.g. planetariums or museums, and even the banking industry.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc majoring in Physics and Astrophysics	BC434017	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC

## Physics and Agrometeorology:

Duration of study: three years

Enquiries: Dr Johan Venter: +27 51 401 3336 | venterja@ufs.ac.za

By combining Physics with Agrometeorology, students get the opportunity to apply numerous physical principles to agrometeorological applications, such as remote sensing, developing and calibrating instrumentation, numerical model refinement, thermodynamical and microphysical processes in the atmosphere, and weather forecasting in general. This is a popular combination with potential employers.

**Careers/fields of study:** Careers in research institutions, e.g. ARC and SAWS; private consultation, e.g. irrigation scheduling; meteorological instrumentation companies, e.g. Campbell Scientific; academia, e.g. university lecturing and research.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Physics and Agrometeorology	BC434012	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

## Physics with Engineering subjects:

Duration of study: three years

Enquiries: Dr Johan Venter: +27 51 401 3336 | venterja@ufs.ac.za

This is a great option, which provides an alternative route into Engineering studies at other academic institutions. In this learning programme, the basic building blocks for Engineering are presented together with Physics. In the last semester (third year), students will have to choose between Physics and Engineering. Students who have successfully completed the programme in the Engineering option, will be able to apply for integration into the third year of study in certain Engineering degree programmes (civil, mechanical, electrical / electronic) at universities offering BEng or BScEng degrees. Integration will be subject to the availability of space in these degree programmes, the selection processes, and other requirements prescribed by the particular collaborating university.

**Careers:** Engineering assistant or construction site manager or the Physics option: this will enable graduates to either enter workplaces requiring a physics focus, or continue with postgraduate studies in Physics should they meet the entrance requirements, or the Engineering option: This will enable graduates to pursue further discipline-specific Engineering studies at other universities such as: Agricultural Engineering, Civil Engineering, Electrical Engineering, Electronic Engineering, Mechanical Engineering, Mechatronic Engineering.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc majoring in Physics and Engineering Subjects	BC434026	34	4 (50%)	6 (70%)	7 (80%)	AL, QL, MT	BC
For BSc majoring in Physics and Engineering, a minimum cumulative point of 12 must be achieved for Mathematics and Physical Sciences. For example, if Mathematics is on level 6 (70%), Physical Sciences must be on level 6 (70%) or if Mathematics is on level 7 (80%), Physical Sciences will be accepted on achievement level 5 (60%).							

The following programmes in Chemistry and Physics are presented on the Qwaqwa Campus:

## Chemistry in combination with Biological subjects:

Duration of study: Three years

Enquiries: Richard Ocaya: +27 58 718 5301 | ocayaro@ufs.ac.za

This learning programme makes provision for a student who is interested in Chemistry and the Biological Sciences where the foundation of Biological systems and Chemistry is involved. It includes careers in any manufacturing industry, as well as in fields such as medicine, the pharmaceutical industry, agriculture (including livestock, crops, pest control, soil, and water), forestry, environmental, waste and pollution management, and various careers in the marine environment. Postgraduate studies may be continued in Chemistry or any of the Biological Sciences if the necessary prerequisites are met.

**Careers/fields of study:** Careers in industry, e.g. food and beverage, brewing, mining, water purification, pharmaceuticals, agriculture, forestry, pollution.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Chemistry and Physics	QC432140	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC
BSc majoring in Chemistry and Botany	QC432120	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC

## LEARNING PROGRAMMES IN CONSUMER SCIENCE

### DURATION OF STUDY: FOUR YEARS

**Enquiries:** Dr Ismari van der Merwe: +27 51 401 2598 | ivnmerwe@ufs.ac.za

Consumer Science is the study of people's needs regarding housing, clothing and food, and the management of resources to satisfy these needs. After completion of this programme, the BConsSc student will be capable of following a career as a consumer scientist, e.g. consumer consultant, designer, buyer, marketer, or quality-control inspector of consumer products. The student should also be capable of advising consumers on the management of time, energy, and other resources. The major subjects are Foods, Consumer Science, and Textiles. After completion of the BSc Consumer Science programme, the student will be able to follow a career in the food industry. The major subjects are Foods and Food Science. Learning programmes in the Consumer Science field of interest offer one option.

**Careers/fields of study:** Consumer consultant, designer, buyer, marketer or quality controller of consumer and food products, product developer, quality controller, consultant or researcher in the food industry.

The following programmes are presented only on the Bloemfontein Campus:

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc (Consumer Science)	BC432300	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC
Bachelor of Consumer Science*	BC430123	30	4 (50%)	3 (40%)	N/A		AL, QL	BC

\*For Bachelor of Consumer Sciences, Mathematical Literacy on level 5 (60%) will also be accepted.

## LEARNING PROGRAMMES IN GEOSCIENCES

### GEOLOGY

**Duration of study: three years**

**Enquiries:** Programme Director: Justine Magson: +27 51 401 2373 | markramj1@ufs.ac.za

Learning programmes in **GEOLOGY** are subject to selection and offer **SIX** main options with either:

- Geology specialisation
- Environmental Geology
- Geology and Geography
- Geochemistry
- Geology and Chemistry
- Geology and Physics

#### Geology specialisation

After completion of this learning programme up to honours level, you will be trained as a professional geologist with employment opportunities in mining, exploration, and research.

**Careers/fields of study:** Careers in mining geology, exploration geology, engineering geology, economic geology, laboratory research, and academia.

#### Geochemistry

After completion of this learning programme up to honours level, you will be trained as a professional geologist/geochemist with job opportunities in mining, exploration, and research.

**Careers/fields of study:** Careers in laboratory research, economic geology, mining geology, exploration geology, engineering geology, and academia.

#### Environmental Geology

After completion of this learning programme up to honours level, you will be qualified as a professional environmental geologist who is able to evaluate applicable problem areas and propose solutions.

**Careers/fields of study:** Careers in environmental management, laboratory research, economic geology, mining geology, exploration geology, engineering geology, and academia.

#### Geology and Chemistry

After completion of this learning programme up to honours level, you will be trained as a professional geologist with employment opportunities in mining, exploration, and research.

**Careers/fields of study:** Careers in mining geology, exploration geology, engineering geology, economic geology, laboratory research, and academia.

#### Geology and Geography

After completion of this learning programme up to honours level, you will be trained as a professional geologist with employment opportunities in mining, exploration, and research.

**Careers/fields of study:** Careers in mining geology, exploration geology, engineering geology, economic geology, laboratory research, and academia.

## Geology and Physics

After completion of this learning programme up to honours level, you will be trained as a professional geologist with employment opportunities in mining, exploration, and research.

**Careers/fields of study:** Careers in mining geology, exploration geology, engineering geology, economic geology, laboratory research, and academia.

The following programmes are offered on the Bloemfontein Campus:

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc majoring in Geology and Chemistry	BC433521	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Environmental Geology	BC433528	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Geochemistry	BC433532	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Geology and Geography	BC433533	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Geology Specialisation	BC433535	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Geology and Physics	BC433540	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC

**Notes:** The selection is based on academic performance.

Admission to all programmes offered in Geology is **SUBJECT TO SELECTION**. We select only 80 students. You will be notified of the outcome as soon as we receive your final matric results.

Closing date for applications is 30 September 2019.

## B. GEOGRAPHY

### DURATION OF STUDY: THREE YEARS

**Enquiries:** Programme Director: Eldalize Kruger: +27 51 401 2185 | krugere@ufs.ac.za

The learning programmes in Geography and the Environmental Sciences are studies of the properties and processes in the earth and on the surface, and encompass a holistic study of the human environment and accompanying interactions and relationships. The programmes are aimed at students who are interested in various aspects of the environment and can lead to specialisation as environmentalists. Careers in these sciences are divergent, because all institutions that are involved with resource utilisation are legally obliged to examine the impact of their activities on the environment. The connection of geographical information and computer technology simplifies the storage, processing, modelling, and presentation of information and expedites decision-making.

The following programmes are presented on the Bloemfontein Campus:

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Geography and Agrometeorology	BC433312	32	4 (50%)	5 (60%)	5 (60%)	N/A	AL, QL, MT	BC
BSc majoring in Geography and Environmental Science	BC433362	32	4 (50%)	5 (60%)	5 (60%)	N/A	AL, QL, MT	BC
BSc majoring in Geography and Geographical Information Systems	BC433369	32	4 (50%)	5 (60%)	N/A	5 (60%)	AL, QL, MT	BC
BSc majoring in Geography and Statistics*	BC433346	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	BC

\*For BSc majoring in Geography and Statistics, either Life Sciences or Physical Sciences are required.

The following programmes are presented on the Qwaqwa Campus:

**Enquiries:** Dr Tom Okello: +27 58 718 5478 | okellotw@ufs.ac.za

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS						
Programme	APC	AP	LOI	MATHS	LS	PS	NBT	Campus
BSc majoring in Geography and Environmental Geography	QC433359	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC
BSc majoring in Geography and Life Sciences	QC433365	32	4 (50%)	5 (60%)	5 (60%)	5 (60%)	AL, QL, MT	QC
BSc majoring in Geography and Tourism	QC433392	32	4 (50%)	5 (60%)	5 (60%)	N/A	AL, QL, MT	QC

**Geographic information systems / Geo-informatics:** Geo-informatics is the science and the technology that develops and uses information science infrastructure to address the problems of geography, geosciences, and related branches of engineering. Students can analyse data spatially with the aid of geographical information systems and provide links between environmental problems and their spatiality.

**Careers/fields of study:** GIS specialist or geo-informatics practitioner.

**Geography and Agrometeorology / Soil Sciences:** Students with a degree in Geography and Agrometeorology / Soil Sciences will understand the interaction between humans and the environment, especially as it impacts on climate, geomorphology, soil, and agriculture. These people typically become geomorphologists, climate specialists or agricultural extension officers providing spatial information and advice in these fields.

**Careers/fields of study:** Environmental assessment practitioner, geomorphologist, climate specialist, agricultural extension officer.

**Geography and Environmental Sciences:** Students with a degree in Geography and Environmental Sciences will not only understand the interaction between humans and the environment, but can also offer solutions for environmental problems which humans have to deal with in the physical, as well as the cultural milieu. These people typically become environmental assessment practitioners or environmental consultants.

**Careers/fields of study:** Environmental assessment practitioner, environmental consultant, environmental manager, environmental officer, spatial planner.

**Geography and Statistics:** Students with a degree in Geography and Statistics understand the complex issue of visualising and manipulating huge data sources. Students can analyse data spatially with the aid of geographical information systems and provide links between environmental problems and their spatiality. These people typically become GIS specialists or spatial planners.

**Careers/fields of study:** GIS specialist, GIS planner, geographic data analyst, spatial planner.

**Geography and Environmental Geography (Qwaqwa Campus):** Students with a degree in Geography and Environmental Sciences will not only understand the interaction between humans and the environment, but can also offer solutions for environmental problems which humans have to deal with in the physical, as well as the cultural milieu. These people typically become environmental assessment practitioners or environmental consultants.

**Careers/fields of study:** Environmental assessment practitioner, environmental consultant, environmental manager, environmental officer, spatial planner.

**Geography and Life Sciences (Qwaqwa Campus):** Students with a degree in Geography and Life Sciences will understand the functional interactions and balance between the abiotic and biotic environment. In an economy where limited resource management and conservation goes hand in hand, the knowledge and understanding of these factors are very important for the sustainability of our natural resources.

**Careers/fields of study:** Researchers in the fields of GIS, ecology (general and restoration), climate change, and conservation management, as well as any associated careers within these research fields.

**Geography and Tourism (Qwaqwa Campus):** Students with a degree in Geography and Tourism will have an understanding of tourism studies in the context of theory, as well as a practical understanding of the nature of tourism and its importance in terms of development and sustainability. Tourism issues are often an interaction of multidisciplinary concepts, and therefore require wide-ranging analytical thinking skills. Students with a degree in Geography and Tourism will have critical thinking skills required for solving the ongoing creation of socio-economic and environmental tourism-related challenges.

**Careers/fields of study:** Tourism management and practice, transdisciplinary studies, tourism development practitioners, tourism development consultants.

## LEARNING PROGRAMMES IN MATHEMATICAL SCIENCES

DURATION OF STUDY: THREE YEARS

**Enquiries:** Programme Directors:

**Applied Mathematics, Mathematical Science:**

Christiaan Venter: +27 51 401 2320 | venterc@ufs.ac.za | **Mathematical Statistics, Actuarial**

**Sciences, Applied Statistics:** Dr Michael von Maltitz: +27 51 401 2609 | vmaltitzmj@ufs.ac.za

Learning programmes in **MATHEMATICAL STATISTICS** offer **FOUR** main options with a combination of disciplines:

- Mathematical Statistics and Agrometeorology (Climate Sciences)
- Mathematical Statistics and Economics (Econometrics)
- Mathematical Statistics and Investment Sciences (Investment Science)
- Mathematical Statistics and Psychology (Psychometrics)

**Careers/fields of study:** Statistical analysis for government institutions, research councils, financial institutions, psychological research centres and industries or a career as lecturer. Investment analyst, investment manager, risk manager, financial reporter, financial planner.

This learning programme focuses on stochastic models with various applications for Mathematical Statistics. It is evident from the numerous options in the third year that there is a vast field for statistical applications in practice. The programme also enables students to proceed with postgraduate study in Mathematical Statistics and Risk Analysis. The Investment Science degree is specifically designed for students with a passion for Mathematics and the workings of finance in any investment type, in particular for students who eventually wish to qualify as a Chartered Financial Analyst. The degree will provide students with a thorough grounding in Mathematics (including, most important, Financial or Investment Mathematics), Mathematical Statistics, Investment Strategies and Practices, and Economics, together with an understanding of Computers, Computer Programming, and Financial Accounting. This basis allows students to follow postgraduate degrees in Investment Science, Mathematical Statistics, or Investment Management.

Learning programmes in **STATISTICS** offer **THREE** main options with a combination of disciplines:

- Applied Statistics and Accounting
- Applied Statistics and Economics
- Applied Statistics and Psychology

**Careers/fields of study:** Economist, econometrician, statistician, research psychologist, financial economist or financial adviser.

The learning programme focuses on the application of statistical methods in practice, and enables students to proceed with postgraduate study in Statistics.

Learning programmes in **MATHEMATICS offer FIVE** main options with a combination of disciplines:

- Mathematics and Applied Mathematics
- Mathematics and Chemistry
- Mathematics and Mathematical Statistics
- Mathematics and Physics
- Mathematics and Finances

**Note:** It is very important that you study the Faculty Rulebook at [www.ufs.ac.za](http://www.ufs.ac.za) as the minimum requirements of any programme can be amended without prior notification.

**Careers/fields of study:** Scientist, mathematical analyst, researcher, lecturer or teacher. Mathematical analysis of financial problems for financial institutions such as banks, insurance, and investment institutions.

These learning programmes are recommended for students who wish to develop a sound mathematical base for a career as a scientist, mathematical analyst, financial mathematician, lecturer or teacher. Students can broaden their scientific background by combining their mathematical subjects with Physics or Chemistry. For a career in Applied Mathematics, the student must first develop a solid mathematical foundation.

The Mathematics and Finances interdisciplinary learning programme is aimed at students who are interested in Mathematics in the financial world. Financial institutions such as banks, insurance and investment companies need well-trained mathematicians with a sound base in the economic sciences. This combination of skills offers excellent career opportunities for graduates who can do mathematical analyses of financial problems. Students can decide how big an emphasis they want to put on the various disciplines. Postgraduate study will enable a person to handle more complex financial models.

Learning programme in **ACTUARIAL SCIENCES:**

**Careers/fields of study:** Actuary, actuarial assistant, risk analyst, financial reporter, manager, investment manager, statistician, teacher.

### Duration of study: three years

This learning programme is specifically designed for students who eventually plan to qualify as actuaries, i.e. as fellows of a professional body. The Actuarial Society of South Africa (ASSA) uses the curriculum of the Joint Board of the Institute/Faculty of Actuaries, UK. Certain South African universities, of which the UFS is one, has an exemption agreement with the Institute/Faculty of Actuaries to recommend students who perform at a certain standard to obtain exemptions for the Core Technical (CT) series subjects. Prospective students can be recommended for exemptions in CT1, CT2, CT3, CT4, CT6, and CT7 after obtaining the degree, as well as for CT5 and CT8 after completing the honours degree. After a candidate has obtained the relevant degrees, such a candidate must also pass the prescribed examinations of the Joint Board of the Institute of Actuaries (London) and the Faculty of Actuaries (Edinburgh) to qualify as a fully-fledged actuary. For more information on this programme, visit [www.ufs.ac.za/actuarial](http://www.ufs.ac.za/actuarial)

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc majoring in Mathematics and Chemistry	BC433821	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Mathematics and Mathematical Statistics	BC433837	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Mathematics and Applied Mathematics	BC433816	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Mathematics and Physics	BC433840	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Mathematics and Finances	BC433864	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Mathematical Statistics and Psychometrics	BC433786	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Econometrics	BC433758	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Investment Sciences	BC433701	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Climate Sciences	BC433712	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Statistics and Accounting	BC434650	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Statistics and Economics	BC434658	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Statistics and Psychology	BC434686	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc majoring in Actuarial Science	BC431000	34	4 (50%)	6 (70%)	N/A	AL, QL, MT	BC

**Notes:** If you enrol for any of the Applied Statistics degrees, Mathematics on level 5 (60%) is required. If Agrometeorology or Chemistry or Physics is the second major, Physical Sciences on level 5 (60%) is required.

## LEARNING PROGRAMMES IN COMPUTER SCIENCE AND INFORMATICS: BSc (IT)

DURATION OF PROGRAMME: THREE YEARS

**Enquiries:** Programme Director: Mr Jaco Marais: +27 51 401 2929/2754 | [maraisj@ufs.ac.za](mailto:maraisj@ufs.ac.za)

The following programmes are presented on the Bloemfontein Campus:



## BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

### [BSc (INFORMATION TECHNOLOGY)]

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc (Information Technology) majoring in Computer Science and Chemistry	BC432221	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Information Technology) majoring in Computer Science and Physics	BC432240	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	BC
BSc (Information Technology) majoring in Computer Science and Mathematics	BC432238	32	4 (50%)	6 (70%)	5 (60%)	AL, QL, MT	BC
BSc (Information Technology) majoring in Computer Science and Mathematical Statistics	BC432237	32	4 (50%)	6 (70%)	N/A	AL, QL, MT	BC
BSc (Information Technology) majoring in Data Science	BC432295	32	4 (50%)	6 (70%)	N/A	AL, QL, MT	BC
BSc (Information Technology) majoring in Computer Science and Business Management	BC432255	32	4 (50%)	4 (50%)	N/A	AL, QL, MT	BC

**Notes:** A higher level in Mathematics may be required in order to register for certain Mathematics modules. If Chemistry or Physics is the second major, Physical Sciences on level 5 (60%) is required.

## BACHELOR OF COMPUTER INFORMATION SYSTEMS [BCompInfoSys]

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	NBT	Campus	
Bachelor of Computer Information Systems (BCompInfoSys)	BC430156	30	4 (50%)	4 (50%)	AL, QL, MT	BC	

The following programmes are presented on the Qwaqwa Campus:

## BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

### [BSc (INFORMATION TECHNOLOGY)]

**Enquiries:** Programme Director: Mr Teboho Lesesa: +27 58 718 5235/5121 | lesesat@ufs.ac.za

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc (Information Technology) majoring in Computer Science and Chemistry	QC432221	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	QC

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	PS	NBT	Campus
BSc (Information Technology) majoring in Computer Science and Physics	QC432240	32	4 (50%)	5 (60%)	5 (60%)	AL, QL, MT	QC
BSc (Information Technology) majoring in Computer Science and Management	QC432202	32	4 (50%)	4 (50%)	N/A	AL, QL, MT	QC

Learning programmes in **COMPUTER SCIENCE AND INFORMATICS** offer **FIVE** main fields:

- Computer Science with Chemistry
- Computer Science with Mathematical Statistics
- Computer Science with Mathematics
- Computer Science with Physics
- Computer Science in Business and Management

## BUILDING SCIENCES

Students need to pass modules in the first semester of study according to the faculty rules and regulations in order to be able to continue with studies in the second semester.

The following programmes are presented only on the Bloemfontein Campus:

## BACHELOR OF ARCHITECTURE (BArch):

**Duration of study: Three years**

**Enquiries:** Programme Director: Kobus du Preez: +27 51 401 2332 | dpreezj@ufs.ac.za

Applications for admission to the BArch programme, on the prescribed application form, must reach the Registrar, Academic Student Services, University of the Free State, Bloemfontein, before or on 31 May of the year before intended admission. A selection procedure takes place before admission (consult [www.ufs.ac.za/architecture](http://www.ufs.ac.za/architecture); 'Academic Information'). Students will be notified of the outcome of the selection process no later than the end of November.

The Bachelor of Architecture involves full-time education that extends over six semesters and involves lectures, projects, and continuous evaluation.

The purpose of this programme is to educate candidates who may register with the South African Council for the Architectural Profession in the appropriate category for which they qualify, in terms of the provisions of the Architectural Profession Act 44 of 2000. The degree BArch provides access to the BArchHons degree.

Students are strongly advised to work in an architect's office or other similar approved institution during holidays, in order to gain practical experience.

The evaluations and examinations for the degree BArch are recognised by the minister concerned, in terms of the provisions of the Architectural Profession Act (Act 44 of 2000). Training experience after completion of the BArch degree will be controlled by the conditions of the South African Council for the Architectural Profession. The registrar of this council will provide information in this regard.

#### Selection procedure:

- All the selection process and creative exercise information is available on the departmental website: [www.ufs.ac.za/architecture](http://www.ufs.ac.za/architecture); see 'Academic Information'.
- You must pass a preliminary selection process. You must start with the creative exercise before 31 May and submit it before or on 31 July 2019.
- If you pass the preliminary selection, you will be invited to a selection interview where you must show us a portfolio of creative work.
- We will notify you of the selection outcome no later than 30 November 2019.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	Selection	NBT	Campus
Bachelor of Architecture BArch	BC430114	30	4 (50%)	4 (50%)	Yes	AL, QL, MT	BC

**Note:** Closing date for applications and the submission of your creative exercises is 31 July 2019.

**Careers/fields of study:** Draughtsman, architectural technologist, architectural assistant, preparation for architect profession, urban and regional planner, landscape architect, interior designer.

## LEARNING PROGRAMME IN QUANTITY SURVEYING AND CONSTRUCTION MANAGEMENT

**DURATION OF STUDY: THREE YEARS**

#### Enquiries:

**Quantity Surveying and Construction Management:** Ms Tascha Bremer: +27 51 401 2996 | [bremert@ufs.ac.za](mailto:bremert@ufs.ac.za)

**Quantity Surveying and Construction Management (Block Learning):** Ms Esti Jacobs: +27 51 401 3394 | [jacobse1@ufs.ac.za](mailto:jacobse1@ufs.ac.za)

Applications for admission to the degree programme should be sent on the prescribed form to: The Director, Student Administration, before or on 31 July of the year prior to the intended admission. You will be informed of the outcome.

Learning programmes in the **BUILDING SCIENCES** offer the following options:

- BSc Construction Management
- Careers/fields of study: Construction business management, production of real estate, operations management, and building management.
- BSc Quantity Surveying
- Careers/fields of study: Professional practising of quantity surveying, construction surveying, cost project management, property development and management.

PROGRAMME DESCRIPTION		MINIMUM ADMISSION REQUIREMENTS					
Programme	APC	AP	LOI	MATHS	Selection	NBT	Campus
BSc (Construction Management)	BC432400	32	4 (50%)	5 (60%)	Yes	AL, QL, MT	BC
BSc (Quantity Surveying)	BC434300	32	4 (50%)	5 (60%)	Yes	AL, QL, MT	BC
BSc (Construction Management) (Block Learning)	BC432401	32	4 (50%)	5 (60%)	Yes	N/A	BC
BSc (Quantity Surveying) (Block Learning)	BC434301	32	4 (50%)	5 (60%)	Yes	N/A	BC

**Notes:** Economics, Business Studies, Accounting or Physical Sciences on level 4 (50%) is required.

Closing date for applications in Construction Management and Quantity Surveying is 31 July 2019.

Students who want to apply for the Block Learning options, also need to:

- Be at least 23 years of age, and
- Supply proof of full time employment in the construction industry

**All information in this publication is subject to change. Information in this publication has been compiled with the utmost care. However, the Council and Senate accept no responsibility for errors. For the modules and module codes of all programmes listed above, study the Faculty Rulebook at [http://apps.ufs.ac.za/dl/yearbooks/309\\_yearbook\\_eng.pdf](http://apps.ufs.ac.za/dl/yearbooks/309_yearbook_eng.pdf). The Faculty Rulebook is the final and correct source.**

This publication was compiled and produced by the Department of Student Recruitment Services at the University of the Free State.

Wekkie Saayman Building  
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University of the Free State  
Bloemfontein

9301

# UFS OPEN DAY

TWENTY

19

11 MAY 2019

BLOEMFONTEIN  
CAMPUS

4 MAY 2019

QWAQWA  
CAMPUS



VISIT THE FACULTIES AND EXHIBITIONS DIRECTLY FROM 09:00-15:00.  
MORE INFORMATION AVAILABLE [WWW.UFS.AC.ZA](http://WWW.UFS.AC.ZA)

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