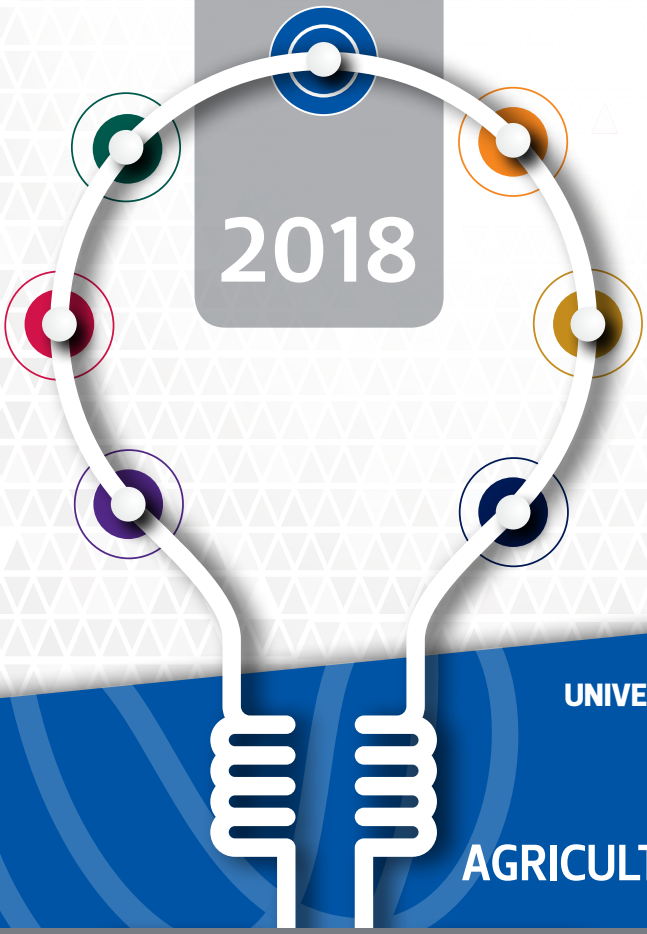

UNIVERSITY OF THE FREE STATE

FACULTY OF NATURAL AND AGRICULTURAL SCIENCES

T: +27(0)51 401 3000 | E: info@ufs.ac.za | www.ufs.ac.za

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Inspiring excellence. Transforming lives.
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UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS UV

GENERAL REGULATIONS:

This information should be used in addition to the Rule book 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.

WHY 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.

FACULTY OF **NATURAL AND AGRICULTURAL SCIENCES**

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 is divided into the following 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 reflect the role the UFS plays 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 due to the stimulating curriculum, and our exciting research agenda. We are an engaged faculty, whose interactions with its community are 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 our Faculty
DEAN: PROF DANIE VERMEULEN

APPLICATION AND ADMISSION TO STUDY AT THE UFS

APPLICATION TO STUDY AT THE UFS IS FREE FOR SA, SADC AND NON-SADC STUDENTS

ONLINE application: Go to www.ufs.ac.za. Follow the link 'how to apply' – online application. For assistance, contact +27 51 401 9538.
Remember to upload copies of:

- Your ID or passport
- Your parent's ID or passport if you are younger than 18 years
- Your Grade 11 final results and Grade 12 June results, both with the school's stamp
- Your academic records if you are a current student at another institution of higher learning

WRITTEN application: Go to www.ufs.ac.za. Follow the link 'how to apply' and download the 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 and Grade 12 June results, both with the school's stamp
- Your academic records if you are a current student at another institution of higher learning

ADMISSION

Pay attention to the following important information:

- Higher Education South Africa (HESA) sets 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 designated subject list.
  - A performance level of at least 4 (50%) in each of these four (4) subjects.
- All admission requirements apply to first-year students in 2018.
- A minimum Admission Point of 30.
- Language of instruction on level 4 (50%).
- A minimum performance level of 50% in Mathematics. Depending on the programme you are interested in, a higher performance level in Mathematics is required.
- Both Biology 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 for 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, 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.

- Admission to study at the UFS is dependent on the following:
  - Your application should meet 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
- The UFS reserves the right to change the minimum requirements of any programme without notifying you.

Applications for all non-selection programmes close on 29 September 2017. The closing dates for the selection courses are as follows:

- Architecture: 31 May 2017
- Construction Management: 31 July 2017
- Quantity Surveying: 31 July 2017
- Forensic Sciences: 29 September 2017
- Geology: 29 September 2017

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%:

Percentage	7 (90–100%)	7 (80–89%)	6 (70–79%)
AP	8	7	6

5 (60–69%)	4 (50–59%)	3 (40–49%)	2 (30–39%)
5	4	3	2

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

We proudly offer programmes on all three campuses, i.e. South Campus (SC), Bloemfontein Campus (BC), and Qwaqwa Campus (QC).

Abbreviations:

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

NSC: National Senior Certificate
NBT: National Benchmark Tests
QC: Qwaqwa Campus
AL: Academic Literacy Test (NBT)
MT: Mathematics Test (NBT)
AP: Admission point
BC: Bloemfontein Campus
SC: South Campus
QL: Quantitative Literacy Test (NBT)

Enquiries: Faculty manager: +27 51 401 3199 | Dean: +27 51 401 2322
Marketing manager: +27 51 401 2531
Webpage: www.ufs.ac.za/natagri | 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

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?

AGRICULTURAL SCIENCES

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

Ms Elzmarie Oosthuizen: +27 51 401 2934

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. UAP Programmes (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 successful completion of a bridging year.

UAP Agricultural Sciences for BAgric

Programme Description		Minimum Admission Requirements				
Programme options	Academic Plan Code	AP	Language of instruction	Mathematics	Mathematical Literacy	Compulsory National Benchmark Test
Agricultural Sciences	50001	20	3 (40%)	2 (30%)	5 (60%)	AL, QL, MT

Note:

- After successful completion of ALL THE MODULES in the first year of the UAP Agricultural Sciences Programme with an average of 55% for the academic modules, you can change to the first-year main fields of interest modules in the learning programme of your choice on the Bloemfontein Campus, as set out in the faculty's Rulebook.
- Either Mathematics or Mathematical Literacy will be accepted. It is a four year programme.
- If you do not complete the first two years of study in three years, you will not be allowed to re-register with the Faculty of Natural and Agricultural Sciences.

Year	Academic modules	Developmental modules
1	Agricultural Economics Biological principles in Agriculture Introduction to Animal, Wildlife and Grassland Sciences	Academic language skills course Basic Computer Literacy Lifelong Learning Mathematical Literacy in Agriculture

EXTENDED CURRICULUM PROGRAMMES

Programme Description		Minimum Admission Requirements				
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Mathematical Literacy	Compulsory National Benchmark Test
BAgric Extended Curriculum Programme*	BC5300E1	25	4 (50%)	2 (30%)	5 (60%)	AL, QL
BScAgric Extended Curriculum Programme**	BC5480E1	25	4 (50%)	3 (40%)		AL, QL, MT

Note:

- If you pass all the academic modules with at least 55% during your first year of study on the South Campus, you can proceed in the second year to the Bloemfontein Campus.
- *Either Mathematics or Mathematical Literacy will be accepted if the AP score is 26 or higher. It is a four year programme.
- **Additional requirements: Life Sciences on level 4 (50%) OR Physical Sciences on level 3 (40%) OR Agricultural Science on level 4 (50%). This is a five-year programme.

BAgric EXTENDED CURRICULUM PROGRAMME

Year	Academic modules	Developmental modules
1	Agricultural Economics Biological principles in Agriculture Introduction to Animal, Wildlife and Grassland Sciences	Mathematics Mathematical Literacy in Agriculture Lifelong Learning Academic language skills course English Basic Computer Literacy

BScAgric EXTENDED CURRICULUM PROGRAMME

Year	Academic modules	Developmental modules
1	Mathematics Chemistry Agricultural Economics Biology	Mathematics Academic language skills course English Lifelong Learning – Natural Sciences Basic Computer Literacy

DIPLOMAS

The University of the Free State only offers the Advanced Diploma in Sustainable Agriculture and Rural Development [postgraduate diploma] and no longer offers undergraduate diplomas in Agricultural Sciences. Contact details: Dr Johan van Niekerk +27 51 401 3765

DEGREES

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.

Enquiries: Dr Antonie Geyer: +27 51 401 9053

Careers/fields of study:

- Agricultural advisor, 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 are presented on the Bloemfontein Campus:

Bachelor in Agriculture (BAgric) in the following majors (three years)

Programme Description		Minimum Admission Requirements			
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Compulsory National Benchmark Test
BAgric majoring in Agricultural Management	BC530152	30	4 (50%)	3 (40%)	AL, QL
BAgric majoring in Animal Production Management	BC530101	30	4 (50%)	3 (40%)	AL, QL
BAgric majoring in Crop Production Management	BC530102	30	4 (50%)	3 (40%)	AL, QL
BAgric majoring in Mixed Farming Management	BC530103	30	4 (50%)	3 (40%)	AL, QL

Programme Description		Minimum Admission Requirements			
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Compulsory National Benchmark Test
BAgric majoring in Irrigation Management	BC530172	30	4 (50%)	3 (40%)	AL, QL
BAgric majoring in Wildlife Management	BC530190	30	4 (50%)	3 (40%)	AL, QL
BAgric majoring in Agricultural Economics	BC530111	30	4 (50%)	3 (40%)	AL, QL

Note: Mathematical Literacy on level 7 (80%) will also be accepted if the AP is 32 or above.

Modules in first year	
Semester 1	Semester 2
Computer Literacy Biological principles in Agriculture Chemical principles in Agriculture Physical and mechanical principles in Agriculture Economic Management of Resources	Mathematical and Biometrical principles in Agriculture Micro-biological principles in Agriculture Advanced Computer Literacy Introduction to Soil, Crop and Climate Sciences Introduction to Animal, Wildlife and Grassland Sciences
Economic Management of Resources Core Business Activity Commercial Law Agricultural Economics	Biometry General Management Accounting Agricultural Finance Marketing

Changing from BAgric to BScAgric

A student who has registered for the BAgric degree can change to a suitable learning programme in the BScAgric degree. This can only be done if the student has passed the compulsory first academic year of the BAgric degree with an average mark of at least 75%, and additional first-year BScAgric modules enrolled for. This should be done in consultation with the programme director in order to comply with the minimum prerequisites for professional registration (SACNASP). The majority of the basic first-year BSc modules will be required in this case. In changing to a BScAgric learning programme, compliance with the prerequisites is essential. Credit will be given for modules that have been passed in the second and/or third academic year.

BScAgric

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

BScAgric degrees (four years unless indicated otherwise):

Enquiries:
Biological Sciences: Biochemistry: Dr F O'Neil +27 51 401 7553
Biological Sciences: Plant Sciences: Dr B Visser +27 51 401 3278
All Agricultural Programmes: Dr Antonie Geyer +27 51 401 9053

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.

The following programmes are presented on the Bloemfontein Campus:

BSc (Agriculture) – 4 years

Programme Description		Minimum Admission Requirements						
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Agricultural Sciences	Compulsory National Benchmark Test
BSc (Agriculture) majoring in Animal Sciences with Agricultural Economics	BC541511	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Grassland Sciences with Animal Sciences	BC543615	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Grassland Sciences with Soil Sciences	BC543644	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Grassland Sciences with Wildlife Production	BC543689	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agrometeorology with Agricultural Economics	BC541211	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agrometeorology with Agronomy	BC541213	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agrometeorology with Grassland Sciences	BC541236	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agrometeorology with Plant Pathology	BC541242	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agrometeorology with Soil Science	BC541244	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agrometeorology with Agricultural Engineering	BC541251	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT

Programme Description		Minimum Admission Requirements						
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Agricultural Sciences	Compulsory National Benchmark Test
BSc (Agriculture) majoring in Agronomy with Agricultural Economics	BC541311	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Agrometeorology	BC541312	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Animal Science	BC541315	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Entomology	BC541327	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Food Science	BC541329	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Plant Breeding	BC541341	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Pathology	BC541342	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Agronomy with Soil Science	BC541344	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Soil Science with Agricultural Economics	BC544411	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Soil Science with Agrometeorology	BC544412	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Soil Science with Agronomy	BC544413	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Soil Science with Grassland Science	BC544436	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Soil Science with Plant Pathology	BC544442	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT

Programme Description		Minimum Admission Requirements						
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Agricultural Sciences	Compulsory National Benchmark Test
BSc (Agriculture) majoring in Soil Science with Agricultural Engineering	BC544451	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Food Science with Agronomy	BC542913	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Food Science with Animal Science	BC542922	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Plant Breeding with Agronomy	BC544112	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Plant Breeding with Plant Pathology	BC544142	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Plant Breeding with Grassland Science	BC544144	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT
BSc (Agriculture) majoring in Plant Pathology with Plant Breeding	BC544241	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT

Note: Either Life Sciences or Agricultural Sciences and Physical Sciences is required.

Modules in first year	
Semester 1	Semester 2
Introduction to Biology Computer Literacy Chemistry Calculus Physics	Introduction to Genetics Introduction to Plant Sciences Chemistry Introduction to Soil, Crop and Climate Sciences Introduction to Animal, Wildlife and Grassland Sciences Advanced Computer Literacy

BSc AGRICULTURAL ECONOMICS (3 YEARS)

The following programme is presented on the Bloemfontein Campus:

The learning programme in Agricultural Economics offers only ONE option. It focuses mainly on Agricultural Economics and Statistics as majors.

Enquiries: Dr Antonie Geyer: +27 51 401 9053

Careers/fields of study:

- Animal, Wildlife and Grassland Sciences: animal breeder, animal physiologist, animal nutritionist, grassland scientist, agricultural advisor, private consultant, farmer, academic, teacher, extension officer, and researcher.
- Soil, Crop and Climate Sciences: agronomist, soil scientist, horticulturist, agro-meteorologist, researcher, agricultural advisor, 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.

Programme Description		Minimum Admission Requirements						
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Agricultural Sciences	Compulsory National Benchmark Test
BSc majoring in Agricultural Economics	BC431100	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	5 (60%)	AL, QL, MT

Note: Either Life Sciences or Physical Sciences or Agricultural Sciences is required.

Modules in first year	
Semester 1	Semester 2
Introduction to Biology Statistics Computer Literacy Agricultural Economics Calculus	Introduction to Plant Sciences Statistics Calculus Agricultural Economics Advanced Computer Literacy Introduction to Soil, Crop and Climate Sciences Introduction to Animal, Wildlife and Grassland Sciences

NATURAL SCIENCES

In the Natural Sciences, we offer the following undergraduate qualifications:

- **Bachelor degrees in:** Bachelor of Consumer Sciences (General and Food); Bachelor of Computer Information Systems.
- **Bachelor of Science in:** Actuarial Sciences, Agrometeorology, Astrophysics, Genetics, Behavioural Genetics, Human Molecular Biology, Biochemistry, Botany, Chemistry, Consumer Science, Construction Management (residential and distance learning), 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, Quantity Surveying (residential and distance learning), Zoology.

UNIVERSITY ACCESS PROGRAMME

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 with 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.

The following UAP programme is offered on the South- and Qwaqwa Campus:

Programme Description		Minimum Admission Requirements					
Programme options	Academic Plan Code	AP	Language of instruction	Mathe-matics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
Natural Sciences	40001	20	3 (40%)	3 (40%)	3 (40%)	3 (40%)	AL, QL, MT

Note: Either Life Sciences or Physical Sciences will be accepted.

Academic modules	Developmental modules
Mathematics Chemistry Biology	Academic language course Basic Computer Literacy Lifelong Learning

Enquiries: Pieter Bothma: +27 51 505 1381 – Bloemfontein;
Lea Koenig: +27 58 718 5207 - Qwaqwa

BSc Extended Curriculum Programmes

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

Enquiries: Pieter Bothma: +27 51 505 1381 (Bfn)

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc Extended Curriculum Programme majoring in Mathematics and Chemistry*	BC4300E1	25	4 (50%)	3 (40%)	4 (50%)	3 (40%)	AL, QL, MT
BSc Extended Curriculum Programme majoring in Mathematics and Finances	BC4300E2	25	4 (50%)	3 (40%)			AL, QL, MT

Note: *Either Life Sciences or Physical Sciences is required.

BSc Extended Curriculum Programme (Chemistry and Mathematics) (4 years)

Academic modules	Developmental modules
Mathematics Chemistry Biology	Academic language course Lifelong Learning Basic Computer Literacy

3. BSc Extended Curriculum Programme (Mathematics and Finances) (4 years)

Academic modules	Developmental modules
Mathematics Accounting or Business Functions/General Management or Introduction to Human Resource Management/ Introduction to Individual Differences or Economics	Academic language course Lifelong Learning Basic Computer Literacy

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

Enquiries: Lea Koenig: +27 58 718 5207

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc Extended Curriculum Programme majoring in Mathematics and Chemistry	QC4300E1	25	3 (40%)	3 (40%)	3 (40%)	3 (40%)	AL, QL, MT
BSc Extended Curriculum Programme majoring in Biology and Geography	QC4300E2	25	3 (40%)	3 (40%)	3 (40%)	3 (40%)	AL, QL, MT
BSc Extended Curriculum Programme majoring in Computer Sciences	QC4301E1	25	4 (50%)	3 (40%)		3 (40%)	AL, QL, MT

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

BACHELOR OF SCIENCE (BSc) DEGREES IN THE FOLLOWING PROGRAMMES:

LEARNING PROGRAMMES IN BIOLOGICAL SCIENCES

Enquiries:

Biochemistry	Dr Frans O'Neill	+27 51 401 7553
Botany, Plant Breeding, Plant Pathology, Plant Health Ecology, Environmental Rehabilitation	Dr Botma Visser	+27 51 401 3278
Genetics, Behavioural Genetics, Human Molecular Biology	Zurika Murray	+27 51 401 2776
Forensic Sciences	Dr Karen Ehlers	+27 51 401 3978
Microbiology	Prof Koos Albertyn	+27 51 401 2223
Zoology and Entomology	Dr Candice Jansen van Rensburg	+27 51 401 9357
Qwaqwa Campus: Biological Sciences	Dr Emile Bredenhand	+27 58 718 5322

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:

Duration of programme: Three years

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Biochemistry and Botany	BC431920	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Entomology	BC431927	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Food Science	BC431929	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Genetics	BC431931	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Microbiology	BC431939	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Statistics	BC431946	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Zoology	BC431949	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Biochemistry and Physiology	BC431980	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Entomology	BC432027	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Genetics	BC432031	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Microbiology	BC432039	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Plant Breeding	BC432041	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Plant Pathology	BC432042	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Zoology	BC432049	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Plant Health Ecology	BC432182	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Entomology and Genetics	BC432731	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Entomology and Microbiology	BC432739	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Entomology and Zoology	BC432749	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Behavioural Genetics	BC433118	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Genetics and Microbiology	BC433139	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Genetics and Physiology	BC433180	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Genetics and Zoology	BC433149	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Microbiology and Food Sciences	BC433929	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Microbiology and Statistics	BC433946	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Microbiology and Zoology	BC433949	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Environmental Rehabilitation	BC432061	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Note: Students intending to register for Chemistry as a major, must 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.

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

Enquiries: Dr Emile Bredenhand: +27 58 718 5322

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Botany and Zoology	QC432049	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Botany and Life Sciences	QC432065	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Life Sciences	QC436500	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Zoology and Life Sciences	QC434965	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Compulsory modules in first year			
Semester 1 and 2			
Biology Chemistry	Biometry Mathematics	Physics Computer Literacy	Advanced Computer Literacy

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.

THE FOLLOWING BEHAVIOURAL GENETICS LEARNING PROGRAMME DIFFERS FROM THE ABOVE BIOLOGY PROGRAMMES:

BEHAVIOURAL GENETICS: Behavioural Genetics (Academic Plan Code: BC433118) 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.

Enquiries: Zurika Murray: +27 51 401 2776

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

Duration of study: three years

Compulsory modules in first year		
Semester 1 and 2		
Biology Biometry	Chemistry Psychology	Mathematics Computer Literacy Advanced Computer Literacy

FORENSIC SCIENCES: 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. You 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 presented only at the Bloemfontein Campus.

Enquiries: Dr Karen Ehlers: +27 51 401 3978

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

Duration of study: three years

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Forensic Sciences	BC433031	34	4 (50%)	6 (70%)	6 (70%)	5 (60%)	AL, QL, MT
		Subject to selection. The 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 29 September 2017.					

Compulsory modules in first year		
Semester 1 and 2		
Biology Chemistry	Physics Mathematics	Computer Literacy and Advanced Computer Literacy

LEARNING PROGRAMMES IN MATHEMATICAL SCIENCES

The following learning programmes are available:

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)

Duration of study: Three years

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.

Enquiries: Dr Michael von Maltitz: +27 51 401 2609.

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 advisor.

Duration of study: three years

Enquiries: Dr Michael von Maltitz: +27 51 401 2609

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 as the minimum requirements of any programme can be amended without proir notification.

Duration of study: three years

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.

Enquiries: Christiaan Venter: +27 51 401 2320

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

Enquiries: Dr Michael von Maltitz: +27 51 401 2609

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, have 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.

The following programmes are presented on the Bloemfontein Campus:

Programme Description		Minimum Admission Requirements				
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Mathematics and Chemistry	BC433821	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Mathematics and Mathematical Statistics	BC433837	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Mathematics and Applied Mathematics	BC433816	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Mathematics and Physics	BC433840	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Mathematics and Finances	BC433864	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Mathematical Statistics and Psychometrics	BC433786	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Econometrics	BC433758	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Investment Sciences	BC433701	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Climate Sciences	BC433712	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Statistics and Accounting	BC434650	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Statistics and Economics	BC434658	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Statistics and Psychology	BC434686	30	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Actuarial Science	BC431000	34	4 (50%)	7 (80%)		AL, QL, MT

Programme description	Modules in first year	
	Semester 1	Semester 2
Mathematical Statistics and: Climate Sciences Econometrics Investment Sciences Psychometrics	Mathematical Statistics Calculus Computer Information Systems Economics Financial Management and Reporting Accounting or Financial Accounting Computer Literacy	Mathematical Statistics Mathematics Introduction to Soil, Crop and Climate Sciences Computer Information Systems Economics Financial Management and Reporting Accounting or Financial Accounting Psychology Investment Science Advanced Computer Literacy
Applied Statistics and: Accounting Economics Psychology	Calculus Computer Information Systems Economics Agricultural Economics Accounting Computer Literacy Psychology Introduction to Human Resource Management	Mathematics Computer Information Systems Economics Agricultural Economics Accounting Advanced Computer Literacy Psychology Introduction to Individual Differences
Mathematics and: Applied Mathematics Chemistry Mathematical Statistics Physics Finances	Calculus Mathematical Statistics Chemistry Physics Financial Accounting Computer Literacy Introduction to Human Resource Management Astrophysics	Calculus Mathematical Statistics Computer Information Systems Financial Accounting Introduction to Individual Differences Economic Systems and Basic Microeconomics Astrophysics
Actuarial Sciences	Calculus Mathematical Statistics Computer Literacy Economic Systems and Basic Microeconomics Financial Management and Reporting	Calculus Mathematical Statistics Advanced Computer Literacy Actuarial Sciences Financial Management and Reporting Computer Information Systems

LEARNING PROGRAMMES IN CHEMICAL AND PHYSICAL SCIENCES

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.

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.

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 Mintek; academia, e.g. university lecturing and research; industry, e.g. manufacturing, energy, nuclear, telecommunications, instrumentation, modelling, Bureau of Standards.

Duration of study: three years

Enquiries: Dr Johan Venter: +27 51 401 3336

The following programmes are offered on the Bloemfontein Campus:

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Chemistry and Biochemistry	BC432119	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Food Sciences	BC432129	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Microbiology	BC432139	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Physics	BC432140	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Botany	BC432120	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

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.

Modules in first year		
Semester 1 and 2		
Chemistry Calculus Mathematical Statistics	Physics Computer Information Systems	Computer Literacy Advanced Computer Literacy

Astrophysics:

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 a 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.

Duration of study: Three years

Enquiries: Dr Johan Venter: +27 51 401 3336

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Physics and Astrophysics	BC434017	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Modules in first year			
Semester 1 and 2			
Chemistry Calculus	Mathematical Statistics Astronomy	Computer Information Systems Statistics	Computer Literacy Advanced Computer Literacy

Physics and Agrometeorology:

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.

Enquiries: Dr Johan Venter: +27 51 401 3336 | Duration of study: three years

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Physics and Agrometeorology	BC434012	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Modules in first year		
Semester 1 and 2		
Calculus Mathematical Statistics	Computer Information Systems Computer Literacy	Advanced Computer Literacy Introduction to Soil, Crop and Climate Sciences

Physics with Engineering subjects:

This programme 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 that offer 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. 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. 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.

Enquiries: Louis Lagrange: +27 51 401 7665/7164 | Duration of study: three years

Programme Description		Minimum Admission Requirements				
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Physics and Engineering Subjects	BC434026	34	4 (50%)	6 (70%)	7 (80%)	AL, QL, MT

Modules in first year of study		
Semester 1 and 2		
Chemistry Calculus Physics Computer Literacy	Object-oriented Computer Programming Applied Mathematics: Statics Applied Mathematics: Dynamics	Academic Literacy, Language and Communication Engineering Drawings Engineering Forum

Chemistry in combination with Biological subjects:

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.

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

Enquiries: Richard Ocaya: +27 58 718 5301

Duration of study: Three years

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Chemistry and Physics	QC432140	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Botany	QC432120	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Entomology	QC432127	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Chemistry and Zoology	QC432149	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Modules in first year of study		
Semester 1 and 2		
Calculus Biology Physics	Computer Literacy Computer Information Systems Biometry	Mathematical Statistics Advanced Computer Literacy

LEARNING PROGRAMMES IN GEOSCIENCES

A. GEOLOGY

Duration of study: three years

Enquiries: Justine Magson: +27 51 401 2373

The following learning programmes are available in GEOLOGY:

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

Geologists are natural scientists that study the matter (e.g. minerals, rocks etc.) that the Earth is composed of and the processes that have shaped and continues to shape the planet on which we live, as well as other solid bodies (e.g. planets, moons, asteroids etc.) occurring within our Solar System. Geologists are sought after in the mining industry where they are involved with the exploration for mineral resources and the mining and beneficiation of these resources for the benefit of society. As a geologist you are likely to get out of the office on a routine basis to perform field work, mapping, core logging or mine visits. Depending on the career path that you choose, you may also spend significant amounts of time in a laboratory setting. In addition to finding employment with mining companies, geologists are also employed by research institutions (including universities), government agencies, financial institutions and consulting firms. Your undergraduate degree in geology with the University of the Free State may allow you entry into one of our honours programmes in geology, which is the minimum academic qualification required to register as a professional natural scientist with the South African Council for Natural Scientific Professions (SACNASP).

Careers/fields of study:
Mining geology, exploration geology, engineering geology, economic geology, laboratory research, geologist/geochemist and academia.

The following programmes are presented on the Bloemfontein Campus:

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Physical Sciences	Selection	Compulsory National Benchmark Test
BSc majoring in Geology and Chemistry	BC433521	30	4 (50%)	5 (60%)	5 (60%)	Yes	AL, QL, MT
BSc majoring in Environmental Geology	BC433528	30	4 (50%)	5 (60%)	5 (60%)	Yes	AL, QL, MT
BSc majoring in Geochemistry	BC433532	30	4 (50%)	5 (60%)	5 (60%)	Yes	AL, QL, MT
BSc majoring in Geology and Geography	BC433533	30	4 (50%)	5 (60%)	5 (60%)	Yes	AL, QL, MT
BSc majoring in Geology Specialisation	BC433535	30	4 (50%)	5 (60%)	5 (60%)	Yes	AL, QL, MT
BSc majoring in Geology and Physics	BC433540	30	4 (50%)	5 (60%)	5 (60%)	Yes	AL, QL, MT

Notes:

- An AP of 34 or higher is highly recommended.
- Closing date for applications is 29 September 2017.
- We select only 80 students. You will be notified of the outcome as soon as the matric results are available.

Modules in first year of study		
Semester 1 and 2		
Geology Calculus Statistics	Physics Chemistry Geography	Introduction to Soil, Crop and Climate Sciences Computer Literacy Advanced Computer Literacy

B. GEOGRAPHY

Enquiries: Programme Director: Eldalize Kruger: +27 51 401 2185

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:

Duration of study: three years

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc majoring in Geography and Agrometeorology	BC433312	30	4 (50%)	5 (60%)	5 (60%)		AL, QL, MT
BSc majoring in Geography and Environmental Science	BC433362	30	4 (50%)	5 (60%)	5 (60%)		AL, QL, MT
BSc majoring in Geography and Geographical Information Systems	BC433369	30	4 (50%)	5 (60%)		4 (50%)	AL, QL, MT
BSc majoring in Geography and Statistics*	BC433346	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
The following programmes are presented on the Qwaqwa Campus:							
BSc majoring in Geography and Environmental Geography	QC433359	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Geography and Life Sciences	QC433365	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
BSc majoring in Geography and Tourism	QC433392	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT

Note: *Either Life Sciences or Physical Sciences is required.

Geographic information systems / Geo-informatics	Modules in first year of study - Semester 1 and 2
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. These people typically become GIS specialists or spatial planners. **Careers/fields of study:** GIS specialist or geo-informatics practitioner.	Geography Calculus Physics Business Management Statistics Computer Information Systems Computer Literacy Advanced Computer Literacy
Geography and Agrometeorology / Soil Sciences	**Modules in first year of study - Semester 1 and 2**
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 Chemistry Business Management Statistics Biology Introduction to Soil, Crop and Climate Sciences Computer Literacy Advanced Computer Literacy
Geography and Environmental Sciences	**Modules in first year of study - Semester 1 and 2**
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 Chemistry Business Management Statistics Biology Introduction to Soil, Crop and Climate Sciences Computer Literacy Advanced Computer Literacy
Geography and Statistics	**Modules in first year of study - Semester 1 and 2**
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 Business Management Statistics Biology Computer Information Systems Introduction to Soil, Crop and Climate Sciences Computer Literacy Advanced Computer Literacy

Geography and Environmental Geography (Qwaqwa Campus)	Modules in first year of study - Semester 1 and 2
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 Calculus Business Management Statistics Biology Computer Literacy Advanced Computer Literacy
Geography and Life Sciences (Qwaqwa Campus)	**Modules in first year of study - Semester 1 and 2**
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 sustainability of our natural resources. **Careers/fields of study:** Researchers in the fields of GIS, ecology (general & restoration), climate change, and conservation management, as well as any associated careers within these research fields.	Geography Calculus Business Management Statistics Biology Computer Literacy Advanced Computer Literacy
Geography and Tourism (Qwaqwa Campus)	**Modules in first year of study - Semester 1 and 2**
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	Geography Business Management Statistics Biology Computer Literacy Advanced Computer Literacy

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

The following programmes are presented on the Bloemfontein Campus:

Bachelor of Science in Information Technology [BSc (Information Technology)]

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

Enquiries: Programme Director: Jaco Marais: +27 51 401 2929/2754

Programme Description		Minimum Admission Requirements				
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Physical Sciences	Compulsory National Benchmark Test
BSc (Information Technology) majoring in Computer Science and Chemistry	BC432221	30	4 (50%)	4 (50%)	4 (50%)	AL, QL, MT
BSc (Information Technology) majoring in Computer Science and Physics	BC432240	30	4 (50%)	4 (50%)	4 (50%)	AL, QL, MT
BSc (Information Technology) majoring in Computer Science and Mathematics	BC432238	30	4 (50%)	4 (50%)	4 (50%)	AL, QL, MT
BSc (Information Technology) majoring in Computer Science and Mathematical Statistics	BC432237	30	4 (50%)	4 (50%)	4 (50%)	AL, QL, MT
BSc (Information Technology) majoring in Computer Science and Business Management	BC432255	30	4 (50%)	4 (50%)	4 (50%)	AL, QL, MT
Bachelor of Computer Information Systems (BCIS)	BC430156	30	4 (50%)	4 (50%)		AL, QL, MT

The following programmes are presented on the Qwaqwa Campus:

Enquiries: Programme Director Qwaqwa: Teboho Lesesa: T: +27 58 718 5235/5121

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc (Information Technology) majoring in Computer Science and Chemistry	QC432221	30	4 (50%)	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc (Information Technology) majoring in Computer Science and Physics	QC432240	30	4 (50%)	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT
BSc (Information Technology) majoring in Computer Science and Management	QC432202	30	4 (50%)	4 (50%)	5 (60%)	4 (50%)	AL, QL, MT

Note: Either Life Sciences or Physical Sciences is required.

Duration of study: Three years

Programme description	Modules in first year of study – Semester 1 and 2
Computer Science with Chemistry	Computer Literacy Introductory Programming in C# Introduction to Computer Hardware Internet and Webpage Development Inorganic and Analytical Chemistry Organic and Physical Chemistry Calculus One of: · Algebra and Differential Equations · Calculus and Linear Algebra
Computer Science with Mathematical Statistics	Computer Literacy Introductory Programming in C# Introduction to Computer Hardware Internet and Webpage Development Introductory Statistics Introductory Probability Theory Calculus Algebra and Differential Equations

Programme description	Modules in first year of study – Semester 1 and 2
Computer Science with Mathematics	Computer Literacy Introductory Programming in C# Introduction to Computer Hardware Internet and Webpage Development Calculus Algebra and Differential Equations One of: · Inorganic and Analytical Chemistry · Mechanics, Optics and Electricity One of: · Organic and Physical Chemistry · Mechanics, Thermodynamics, Electricity and Magnetism
Computer Science with Physics	Computer Literacy Introductory Programming in C# Introduction to Computer Hardware Internet and Webpage Development Mechanics, Optics and Electricity Mechanics, Thermodynamics, Electricity and Magnetism Calculus One of: · Algebra and Differential Equations · Calculus and Linear Algebra
Computer Science in Business and Management	Computer Literacy Introductory Programming in C# Introduction to Computer Hardware Internet and Webpage Development Two of: · Introduction to Information Systems · Human Resources Management · Business Functions · Business Calculations · Calculus Two of: · Computer Assisted Programming · Individual Differences · Accounting · Business Calculations · Calculus and Linear Algebra
Computer Information Systems	Computer Literacy Introductory Programming in C# Introduction to Information Systems Computer-assisted Programming Business Functions Human Resources Management Business Calculations Individual Differences

LEARNING PROGRAMMES IN CONSUMER SCIENCE

Bachelor of Consumer Science (BConsSc) 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:

Enquiries: Prof HJH Steyn: +27 51 401 2304 | Duration of study: four years

Programme Description		Minimum Admission Requirements					
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Life Sciences	Physical Sciences	Compulsory National Benchmark Test
BSc (Consumer Science)	BC432300	30	4 (50%)	5 (60%)	5 (60%)	4 (50%)	AL, QL, MT
Bachelor of Consumer Science	BC430123	30	4 (50%)				AL, QL

Programme description	Modules in the first year of study - Semester 1 and 2	
BSc (Consumer Science) Food	Biology Chemistry Physics Computer Literacy / Advanced	Computer Literacy Food security Consumer Science Biometry
BConsSc General	Food security Basic Construction Fashion History General Management	Consumer Science Computer Literacy/Advanced Computer Literacy
BConsSc Food	Food security Nutrition General Management	Consumer Science Computer Literacy/Advanced Computer Literacy

BUILDING SCIENCES

The following programmes are presented only on the Bloemfontein Campus:

LEARNING PROGRAMME IN ARCHITECTURE

Applications for admission to the BArch programme, on the prescribed application form, must reach the Registrar, Student Academic 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; '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:

- A selection process takes place before admission. A maximum number of 55 students are admitted.
- A student registered for a programme at the UFS and wishing to change to the BArch programme, must contact the department on or before 31 May of the year before intended registration.
- All information pertaining to the selection process is available on the departmental website: www.ufs.ac.za/architecture; see 'Academic Information'.
- Applicants have to pass a preliminary selection process.
- Applicants who passed the preliminary selection will be invited to a selection interview at which a portfolio of creative work has to be presented.
- Qualifying applicants must write aptitude and NBT tests and submit the results to the department before the selection interview.
- Students will be notified of the outcome not later than the end of the year before intended registration.

Enquiries: Jako Olivier: +27 51 401 2332

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

Duration of study: Three years

Programme Description		Minimum Admission Requirements				
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Selection	Compulsory National Benchmark Test
Bachelor of Architecture BArch	BC430114	30	4 (50%)	4 (50%)	Yes	AL, QL, MT

Note: Qualifying applicants must write aptitude and NBT tests and submit the results to the department before the selection interview. Closing date for applications in BArch is 31 May 2017.

Modules in the first year of study	
Semester 1	Semester 2
Design Construction History of Architecture Presentation Techniques Trigonometric Drawing	Photography

LEARNING PROGRAMME IN QUANTITY SURVEYING AND CONSTRUCTION MANAGEMENT

Enquiries: Dr Benita Zulch: +27 51 401 3849

Duration of study: Three years

Applications for admission to the degree programme should be sent on the prescribed form to: The Director, Student Academic Services, 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 FOUR OPTIONS:

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

The following programmes are presented only on the Bloemfontein Campus:

All learning programmes are SELECTION PROGRAMMES –
Closing date for applications: 31 July 2017

Programme Description		Minimum Admission Requirements				
Programme	Academic Plan Code	AP	Language of instruction	Mathematics	Selection	Compulsory National Benchmark Test
BSc (Construction Management) (Residential)	BC432400	34	4 (50%)	5 (60%)	Yes	AL, QL, MT
BSc (Quantity Surveying) (Residential)	BC434300	34	4 (50%)	5 (60%)	Yes	AL, QL, MT
BSc (Construction Management) (Open Learning)	BC432401	34	4 (50%)	5 (60%)	Yes	AL, QL, MT
BSc (Quantity Surveying) (Open Learning)	BC434301	34	4 (50%)	5 (60%)	Yes	AL, QL, MT

Notes:

- Economics, Business Studies, Accounting or Physical Sciences on level 4 (50%) is recommended.

Programme description	Modules in the first year of study	
	Semester 1	Semester 2
BSc (Construction Management) (Residential)	• Production and operational management • Construction economics • Property development economics • Physics • Business functions • Statistics • Accounting	Mathematics Accounting
	ONE of the following:	
	• English • Engineering Science	Statistics
BSc (Quantity Surveying) (Residential)	• Descriptive quantification • Construction economics • Property development economics • Physics • Business functions • Statistics • Accounting	Mathematics Accounting
	ONE of the following:	
	• English • Engineering Science	Statistics

Programme description	Modules in the first year of study	
	Semester 1	Semester 2
BSc (Construction Management) (Distance Learning)	• Building economics • Physics • Business functions • Production and Operational Management • Property Development economics • Statistics • Accounting	Mathematics Accounting
	ONE of the following:	
	• English • Engineering Science	Statistics
BSc (Quantity Surveying) (Distance Learning)	• Building economics • Descriptive Quantification • Physics • Business functions • Property development economics • Statistics • Accounting	Mathematics Accounting
	ONE of the following:	
	• English • Engineering Science	Statistics

Any information in this document is subject to change. Information included in this publication has been compiled with the utmost care. However, the Council and Senate accept no responsibility for any errors. Studying the Faculty Rule book as the final and correct source is important.

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2018

Bloemfontein Campus
13 May 2017

Qwaqwa Campus
20 May 2017

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