



Admission requirements for undergraduate programmes

## Stellenbosch University Open Day: Saturday, 20 April 2024

On our annual on-campus Open Day, we welcome Grade 11 and 12 learners, parents, teachers and guidance counsellors to the Stellenbosch and Tygerberg campuses. Come and attend specially prepared information sessions, exhibitions and demonstrations in world-class facilities. Visit our beautiful campus and experience the vibrant student communities and residences. **Open Day Website:** If you cannot visit the campus, we've got you covered! Join us from the comfort of your home, school or any convenient meeting place offering Wi-Fi between 6 April and 31 July and get access to all the open day information sessions. [Stay up to date: visit www.maties.com]

#### Consultation session

Learners (and their parents/guardians) are welcome to book individual face-to-face or online appointments with a Student Recruitment Practitioner. Appointments cover topics such as the various programmes, as well as the prescribed process to apply to the University. Bookings: csr@sun.ac.za / O21 808 4709

#### **Guidance and assessments**

Learners (and their parents/guardians) are welcome to book individual face-to-face or online appointments for subject choice (grade 9) or study career (grade 11 or 12) assessment and guidance. These services are delivered at a rate of R2 850 (Mon-Fri) or R3 350 (Sat) per learner by one of our independently contracted educational/counselling psychologists. Assessments take place on-campus or online, followed by individual feedback and a written report. Bookings: csr@sun.ac.za / O21 808 4709

## Basic admission requirements for university study

- A National Senior Certificate (NSC) or Independent Examinations Board (IEB) school-leaving certificate as certified by Umalusi for admission to bachelor's degree studies
- Except for School of Tomorrow matriculants and applicants for programmes in the Faculty of Law, the University does not require National Benchmark Tests (NBTs) for admission to programmes in 2024.
- Further specific requirements to be found under individual programmes.
- Also see the faculties' selection guidelines on www.maties.com
   Apply > Admission and selection requirements.



### International applicants

The academic record of applicants, who apply with an international examination qualification, will be evaluated by the Admission Office in collaboration with Stellenbosch University International. More information for applicants with international qualifications is available at www. maties.com > Apply > International curricula.





## **FACULTY OF AGRISCIENCES**

## **BAgric in Agribusiness Management (3 years)**

- An NSC aggregate of at least 60% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%

Similar programmes: BScAgric in Agricultural Economic Analysis and Management; BCom (Management Sciences) with focal area: Agricultural Economics

**Career opportunities:** Manager in agribusiness, focusing on crop or animal production. An agricultural economist at a financial institution (feasibility studies, business plans, cash flow planning).

## **BScAgric in Agricultural Economics (4 years)**

- An NSC aggregate of at least 60% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%

#### Fields of study

- Agricultural Economic Analysis
- Agricultural Economic Analysis and Management
- Agricultural Economic Analysis and Management with Food Science
- Agricultural Economics with Food Science

Similar programme: BCom (Management Sciences) with focal area: Agricultural Economics

Career opportunities: Researcher in macroeconomic analysis (impact assessment and design of agricultural and food policy); agricultural economist at a financial institution or marketing organisation (valuations, risk analyses, business plans, cash flow); manager and specialist at public sector or international organisations dealing with economic development (e.g. the World Bank). Manager of food-processing concerns.

## BAgric in Agricultural Production and Management: Elsenburg (3 years)

This programme is offered in collaboration with the Cape Institute for Agricultural Training: Elsenburg. Students reside on the Elsenburg campus where they receive all their training. For more information, phone the Institute on 021 808 7700.

- An NSC aggregate of at least **55**% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 50% OR Mathematical Literacy 60%
- Physical Sciences (Physics and Chemistry) 50% OR Life Sciences 50% OR Agricultural Sciences 50%

## Fields of study

- Animal Production
- Cellar Management
- Cellar Technology
- Extension and Animal Production
- Extension and Plant Production
- Plant Production
- Plant and Animal Production

## **BScAgric in Animal Production Systems (4 years)**

- An NSC aggregate of at least 60% (excluding Life Orientation
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%

#### Field of study

- Animal Science

Similar programmes: Any BScAgric programme with similar subjects; request to change after the 1st semester and/or academic year; BAgric Agricultural Production and Management (Elsenburg) with focal area Animal Production or Extension & Animal Production.

Career opportunities: Consultant, entrepreneur, manager, technician, extension officer or production manager in animal sciences or related industries (such as animal nutrition, meat science, animal physiology, animal reproduction and animal breeding), or the aquaculture industry, stock-farmer and game farmer

## **BSc in Conservation Ecology (4 years)**

- · An NSC aggregate of at least 60% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%

**Similar programmes:** BSc in Biodiversity and Ecology; BScFor (Forestry and Natural Resources Sciences)

Career opportunities: Careers in environmental impact assessment and monitoring, restoration ecology, conservation biology, game farm management, ecotourism, sustainable agriculture, forestry and organic plant management, community-based natural resource management and research into conservation biology.

#### Bachelor of Data Science (BDatSci) (4 years)

This is an interfaculty programme.

- An NSC aggregate of at least 80% (excluding Life Orientation)
- Mathematics 80%
- · Afrikaans Home Language 60% or
- · English Home Language 60% or
- · Afrikaans First Additional Language 75% or
- English First Additional Language 75%

#### Field of study

- Statistical Genetics

Career opportunities: Statistical genetics is the field of study where statistical methods are used to make inferences of genetic data. It is used in fields such as population quantitative genetics by for example plant breeders and conservation geneticists and in genetic epidemiology where the effects of genes on diseases are studied.

#### **BSc in Food Science (4 years)**

- An NSC aggregate of at least 60% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%

**Similar programmes:** BSc in Dietetics; BSc in Molecular Biology and Biotechnology; BSc in Chemistry

**Career opportunities:** Food scientists are employed to do quality assurance, product development, research, technical support, sales, purchasing and production management in the food industry.

## BSc in Forestry (Forestry and Wood Sciences) (BScFor) (4 years)

- An NSC aggregate of at least 60% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- · See additional requirements for each field of study

#### Fields of study

- Forestry and Natural Resources Sciences:
- · Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%
- Wood and Wood Products Sciences:
- · Mathematics 70%
- Physical Sciences (Physics and Chemistry) 60%

#### Similar programmes:

Forestry and Natural Resources Sciences: BSc in Conservation Ecology; BScAgric Plant & Soil Sciences; BSc in Earth Science Wood and Wood Products Sciences: BEng (Industrial); BSc in Geoinformatics

#### Career opportunities:

Forest and Natural Resources Sciences: Work as a forestry expert, timber grower, environmental planner, forest researcher, forester, extension officer or consultant, logistics manager, tree breeder, rural development advisor and entrepreneur.

Wood and Wood Products Sciences: Work as a wood products expert, manager in a production plant for wood products, product development manager, quality assurance manager, consultant and wood scientist.

## **BScAgric in Plant and Soil Science (4 years)**

- An NSC aggregate of at least 60% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%
- See the higher requirement below for the field Soil and Water Management

#### Fields of study

- Crop Production Systems
- Crop Production Systems with Agronomy, Agricultural Economics and Animal Science
- Crop Protection and Breeding
- Soil and Water Management

If you take Soil Science and Chemistry as majors in this field:
Mathematics 70%

Similar programmes: BScAgric Viticulture & Oenology; BSc in Molecular Biology & Biotechnology; BSc in Biodiversity and Ecology; BSc in Earth Science; BAgric Agricultural Production and Management (Elsenburg) with focal area Plant Production or Extension and Plant Production.

Career opportunities: Career opportunities in crop production (agronomy, deciduous fruit, citrus, fynbos, viticulture and greenhouse), crop protection, genetic crop improvement, and soil and water management. Various careers in the agricultural industry or agriculture-related industries, such as consultant, entrepreneur, manager, extension officer, technician or researcher.

## **BScAgric in Viticulture and Oenology (4 years)**

- An NSC aggregate of at least **60**% (excluding Life Orientation)
- English OR Afrikaans (Home Language or First Additional Language) 50%
- Mathematics 60%
- Physical Sciences (Physics and Chemistry) 50%

Similar programmes: BScAgric Plant & Soil Sciences; BSc in Molecular Biology & Biotechnology; BAgric Agricultural Production and Management (Elsenburg) with focal area Cellar Management or Cellar Technology.

Career opportunities: Winemaker, viticulturist, researcher, production manager, marketer, technician, consultant or entrepreneur in wine-related industries.

#### Extended Curriculum Programmes (ECPs)

An ECP entails one extra year of study. Except for BAgric in Agricultural Production and Management: (offered by Elsenburg Training Institute), all the programmes above are also available as extended degree programmes.

An NSC/IEB aggregate of at least 60% (excluding Life Orientation)
English OR Afrikaans (Home Language or First Additional
Language) 50%
AND

Comply with one of the following combinations:

#### Combination 1

Mathematics between 55% and 59,9%

Physical Sciences (Physics and Chemistry) > **50**%

#### Combination 2

Mathematics ≥ **60**%

Physical Sciences (Physics and Chemistry) between 45% and 49,9%

#### BScAgric with Soil Science and Chemistry as major subjects:

#### **Combination 1**

Mathematics between 60% and 69,9%

Physical Sciences (Physics and Chemistry) > **50**%

#### **Combination 2**

Mathematics ≥ **70**%

Physical Sciences (Physics and Chemistry) between 45% and 49,9%

#### **BScFor (Wood and Wood Products Sciences):**

#### Combination 1

Mathematics between 60% and 69,9%

Physical Sciences (Physics and Chemistry) ≥ **60**%

#### Combination 2

Mathematics ≥ **70**%

Physical Sciences (Physics and Chemistry) between 55% and 59,9%

# FACULTY OF ARTS AND SOCIAL SCIENCES

#### Admission and selection

A National Senior Certificate (NSC) or school-leaving certificate from the Independent Examination Board (IEB) as certified by Umalusi with a mark of at least 4 (50%) in each of the four school subjects from this list of school subjects: Accounting; Agricultural Sciences; Business Studies; Consumer Studies; Dramatic Arts; Economics; Engineering Graphics and Design; Geography; History; Information Technology; Life Sciences; Mathematics; Mathematical Literacy;

Music; Physical Sciences; Religion Studies; Visual Arts; Languages (one language of learning and teaching at a higher education institution and two other recognised language subjects).

#### GENERAL DEGREE PROGRAMMES

## BA in Humanities# (3 years)

- An NSC aggregate of at least 63% (excluding Life Orientation)
- Home Language **50**%
- First Additional Language **40**% If you take Socio-Informatics as a university subject, then also:
- Mathematics 50% OR Mathematical Literacy 70%

#### Similar programme: BA degree

Career opportunities: A choice of many subjects that focus on either of the two routes. Further postgraduate training prepares you for professions such as teacher, psychologist, language practitioner, journalist and town and regional planner.

Routes:

- Human Thought, Language, Culture and Art
- People and Society

#### BA in Language and Culture# (3 years)

- An NSC aggregate of at least 63% (excluding Life Orientation)
- Home Language 50%
- First Additional Language 50%

**Similar programmes:** BA in Humanities; BA in International Studies; BA in Political, Philosophical and Economic Studies.

**Career opportunities:** Careers in professions requiring expertise in languages and culture, diplomatic service, teaching, publishing, advertising, tourism, journalism and the translation industry.

#### SPECIALISED DEGREE PROGRAMMES

## BA in Development and the Environment# (3 years)

- An NSC aggregate of at least 63% (excluding Life Orientation)
- Home Language 50%
- First Additional Language 40%
  - If you take Socio-Informatics as a university subject, then also:
- Mathematics 50% OR Mathematical Literacy 70%
   If you take Economics as a university subject, then also:
- Mathematics 60%

Similar programmes: BSc in GeoInformatics; BSc in Earth Science; BCom (Management Sciences): Focal Area Public and Development Management; Diploma in Sustainable Development.

Career opportunities: Career possibilities in community development, population development, town and regional planning, tourism, resource planning and management, and environmental planning and management in the public and private sectors.

#### **BA in Drama and Theatre Studies (3 years)**

- An NSC aggregate of at least 65% (excluding Life Orientation)
- Home Language 60%
- First Additional Language 50%
- Selection requirements are available at www.maties.com > Apply > Application documents; or at akg@sun.ac.za.

Candidates must be available for auditions and/or interviews at the Drama Department in Stellenbosch during August.

Career opportunities: This qualification equips you for a career in the theatre and media industries, and gives you access to related fields such as public relations, marketing, teaching and cultural affairs

Routes:

- Acting and Performance Training
- Technical and Management Training

## BA in Human Resource Management# (3 years)

- An NSC aggregate of at least 63% (excluding Life Orientation)
- Home Language 50%
- First Additional Language 40%
- Mathematics 50% OR Mathematical Literacy 70%

Similar programmes: BCom (Management Sciences): Focal Area Human Resource Management; BCom (Industrial Psychology)

Career opportunities: Development manager, human resource manager, psychometrician, management consultant and labour relations practitioner. Leads to postgraduate studies in Human Resource Management or Industrial Psychology.

#### BA in International Studies# (3 years)

- An NSC aggregate of at least 63% (excluding Life Orientation)
- English Home Language 50% OR English First Additional Language 60%

Similar programmes: BA in Humanities; BA in Language and Culture; BA in Political, Philosophical and Economic Studies; BCom (International Business).

Career opportunities: The diplomatic service, parliament, the National Intelligence Agency, the tourism industry, international journalism, public liaison work, the import and export industry, and institutions that promote commerce and investment (e.g. Wesgro), international organisations (such as the UN, Amnesty International, World Economic Forum).

### BA in Law (3 years)

See BA (Law) under the Faculty of Law, page 8.

## Bachelor of Music (BMus) (4 years)

- An NSC aggregate of at least 60% (excluding Life Orientation)
- Home Language 50%
- First Additional Language 40%
- In the main instrument (or in singing) at least a practical standard in classical music equivalent to the Grade VII examination and theoretical knowledge equivalent to any of the examining bodies' Grade V theory examination.
- Candidates must be available for an audition and theoretical test at the Department of Music in Stellenbosch, where candidates must demonstrate proof of the required standards. Upon receiving your application, we send you information about the audition. Further information at auditions@sun.ac.za If you take Mathematics as a university subject, then also:
- Mathematics 70%

Career opportunities: Music educator (lecturer or teacher), performing artist, accompanist, music director, musicologist, composer or conductor. Music-related professions such as journalist, music arranger or music technologist.

Postgraduate fields of study: music education, performance, chamber music/accompaniment, soloist singer/solo instrumentalist, musicology, composition, music technology, ethnomusicology and choral conducting.

Routes:

- Music Education
- Musicology
- Music Technology
- Performance
- Composition

## BA in Music (3 years)

- An NSC aggregate of at least 60% (excluding Life Orientation)
- Home Language 50%
- First Additional Language 40%
- In the main instrument (or in singing) at least a practical standard in classical music equivalent to the Grade VII examination and theoretical knowledge equivalent to any of the examining bodies' Grade V theory examination.
- Candidates must be available for an audition and theoretical test at the Department of Music in Stellenbosch, where they must demonstrate proof of the required standards. Upon receiving your application, we send you information about the audition. Further information at auditions@sun.ac.za.
   If you take Mathematics as a university subject, then also:
- Mathematics 70%

Career opportunities: Private music teacher, conductor, performing artist or accompanist. Upon further studies music-related professions such as music journalist, music therapist or high school teacher. Postgraduate studies in your chosen major may open up other careers.

## Diploma in Practical Music (3 years)

- A National Senior Certificate with at least 40% in each of four school subjects (excluding Life Orientation).
- In the main instrument (or in singing) at least a practical standard in classical music equivalent to the Grade VII examination and theoretical knowledge equivalent to any of the examining bodies' Grade III/IV theory examination.
- Candidates must be available for an audition and theoretical test at the Department of Music in Stellenbosch, where they must demonstrate proof of the required standards. Upon receiving your application, we send you information about the audition. Further information at auditions@sun.ac.za.

**Career opportunities:** Instrumental or singing teacher, choral conductor, church organist, performing artist or orchestral musician.

#### Advanced Diploma in Practical Music (1 year)

- You must have a Diploma (Practical Music), or another qualification in music as approved by Senate.
- You will be selected based on a selection audition. If you do not have the necessary qualifications, you may be accepted on condition that you undertake supplementary work.
- Candidates must be available for an audition at the Department of Music in Stellenbosch, where they must demonstrate proof of the required standards. Upon receiving your application, we send you information about the audition. Further information at auditions@sun.ac.za.

Career opportunities: Performing artist, accompanist, music teacher or conductor. Studies might allow admission to BMus with specialisation in Music Education, Musical Performance in Chamber Music or Accompaniment, Solo Singing or Solo Performance, Musicology, Composition, Music Technology, Church Music, Ethnomusicology or Choir Conducting.

## **Higher Certificate in Music (1 year)**

- A National Senior Certificate
- In the main instrument (or in singing) at least a practical standard in classical music equivalent to the Grade V/VI examination and theoretical knowledge equivalent to any of the examining bodies' Grade III/IV theory examination.
- Candidates must be available for an audition. Further information at auditions@sun.ac.za.

Career opportunities: You can add value to community music projects. This qualification can prepare you for the Diploma in Practical Music or one of the music degree programmes, provided you comply with all the admission requirements.

## BA in Political, Philosophical and Economic Studies (PPE) (3 years)

- · An NSC aggregate of at least 63% (excluding Life Orientation)
- Home Language 50%
- First Additional Language 40%
- Mathematics 60%

Similar programme: BA in Humanities; BA in Language and Culture; BA in International Studies; BCom (Economic Sciences); BCom (International Business); Bachelor of Data Science (BDatSci): Focal Area Behavioural Economics

**Career opportunities:** Manager, journalist, business or investment analyst, entrepreneur, diplomat, civil servant, researcher, consultant or academic.

## Bachelor of Social Work (4 years)

## 100 places in the programme.

- An NSC aggregate of at least 63% (excluding Life Orientation
- Home Language **50**%
- First Additional Language 50%

Similar programme: BTh (Bachelor of Theology)

Career opportunities: Social workers in state departments, non-profit organisations, facilities for persons with special needs, schools, hospitals, occupational settings, and private practice. Can also practice internationally.

## **BA in Sport Science (3 years)**

**Place for 60 students**. Attendance of and participation in sport practicals are compulsory.

- An NSC aggregate of at least 60% (excluding Life Orientation)
- · Home Language 50%
- First Additional Language 40%
- Mathematics 40% OR Mathematical Literacy 70%
- Physical Sciences 40% OR Life Sciences 50%

**Similar programmes:** BSc in Sport Science; BSc in Human Life Sciences, BSc in Physiotherapy.

Career opportunities: Sports coaching, recreation leadership, sports administration, sports marketing, sports management, sport for persons with disabilities, the fitness industry, biokinetics (on completing honours degree and internship), sport research and teaching (physical training).

## BA in Visual Arts (4 years)

Place for 60 students.

- An NSC aggregate of at least 60% (excluding Life Orientation)
- Home Language **50**%
- First Additional Language 40%

Hand in a prescribed portfolio of art by **1 September**. Information is available at www. maties.com > Apply > Application documents.

Career opportunities: Professional fine artist, art teacher, graphic designer, illustrator, jewellery designer and manufacturer, art critic or art theorist. Related professions: stage designer, book designer, curator, museum and art gallery custodian, art dealer, art entrepreneur, gemmologist, technical expert in sculpture, welding, casting, lithography as well as fields such as film production, art direction, photography and advertising.

- Routes: - Fine Arts
- Jewellery and Metal Design
- Visual Communication Design

## Bachelor of Data Science (BDatSci) (4 years)

This is an interfaculty programme.

- An NSC aggregate of at least 80% (excluding Life Orientation)
- Mathematics 80%
- PLUS one of the following:
- Afrikaans Home Language 60% OR
- English Home Language 60% OR
- Afrikaans First Additional Language 75% OR
- English First Additional Language 75%

#### Focal area

- Geoinformatics

Career opportunities: Geoinformatics is the science and technology dealing with the structure and character of spatial information, its capture, its classification and qualification, its storage, processing, portrayal and dissemination.

## # Extended Curriculum Programmes (4 years)

Available in all programmes marked with a #. Students are selected for the extended curriculum programmes at the discretion of the Faculty.

# FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

#### Admission and selection

All applicants must meet the minimum admission requirements of the programme they apply for. Please note that all applicants undergo a general selection process. Therefore, even if you meet the minimum admission requirements of a programme you may not be admitted to that programme. Visit the Faculty's webpage at www.sun.ac.za/ems for the selection criteria applied by the Faculty.

#### UNDERGRADUATE DIPLOMA PROGRAMME

## **Diploma in Sustainable Development (3 years)**

Students are selected on academic merit and information provided in an application form as part of the departmental process. The number of selected students is limited. The language of instruction is English.

- An NSC aggregate of at least 55% (excluding Life Orientation)
- English Home Language 50% OR English First Additional Language 60% AND

- Mathematics 50% OR
- Mathematical Literacy 60% OR
- Mathematics 40% or Mathematical Literacy 50% AND 60% for Business Studies or Economics or Accounting

**Similar programmes:** BA in Development and the Environment; BSc in GeoInformatics; BCom (Management Sciences): Focal Area Public and Development Management.

Career opportunities: The Diploma will build your entrepreneurial and intrapreneurial competencies. Entrepreneurs are independent thinkers who use their knowledge and skills to create employment opportunities for themselves and others. Intrapreneurs are innovative, action-orientated, self-motivated people who drive positive change in organisations and companies. Job opportunities at companies whose work aligns with the Sustainable Development Goals.

#### **DEGREE PROGRAMMES WITH A FOCUS ON LAW**

For admission requirements, see under the Faculty of Law on page 8.

- BCom (Law) (3 years)
- BAccLLB (5 years)

## BROAD DEGREE PROGRAMMES WITH VARIOUS CAREER FOCUSES

## **BCom (Economic Sciences) (3 years)**

- An NSC aggregate of at least 65% (excluding Life Orientation)
- Mathematics 60%
- English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

#### Focal areas

- Econometrics
- Economic and Management Consultation
- Financial Sector
- Transport Economics

Similar programmes: BScAgric in Agricultural Economics; BA in Political, Philosophical and Economic Studies (PPE); BCom (Management Sciences); BCom (Mathematical Sciences); Bachelor of Data Science (BDatSci): Focal Area Behavioural Economics

Career opportunities: Economics allows a wide choice of careers. Although some careers require postgraduate studies in Economics and Econometrics, experience has shown that undergraduate qualifications in Economics yield good returns for careers in the business world and the public sector. In business, microeconomics facilitates logical decision-making in the firm while macroeconomics provides insight into the economic environment within which the enterprise operates. Majoring in Economics may also improve the likelihood of promotion in government departments. Economics also creates opportunities in teaching and is recommended for students who envisage a career in journalism.

## **BCom (Management Sciences) (3 years)**

- An NSC aggregate of at least 65% (excluding Life Orientation)
- Mathematics 60%
- English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

#### Focal areas

- Agricultural Economics
- Business Analytics

- Entrepreneurship and Innovation
- Financial Management
- Financial Planning
- Human Resource Management
- Information Systems Management
- Investment Management
- Logistics and Supply Chain Management
- Marketing Management
- Public and Development Management

Similar programmes: BScAgric in Agricultural Economics; BAgric in Agribusiness Management; BA in Development and the Environment; BA in Human Resource Management; BCom (Economic Sciences); BCom (Mathematical Sciences); BCom (International Business).

#### Career opportunities:

Agricultural economics: Careers include entrepreneurship, general management, financial management and logistics management for the provision of agricultural inputs and services, for the processing and distribution of agricultural products, and for agricultural financing.

Business Analytics: Careers in the fields of business intelligence, consulting, advanced analytics, research in various sectors such as banks, retail companies and research institutions.

Entrepreneurship and innovation: This focal area teaches you how to create your own job opportunities and make creative contributions to other businesses. If you are interested in becoming part of an entrepreneurial and/or innovation team of an organisation this focal area would be of interest to you.

Financial management: Whether you consider starting your own business or working for a big company, a sound knowledge of financial management is essential for success. Follow a career as an investment analyst, financial analyst, risk manager, financial manager, financial consultant or financial adviser.

Financial Planning: This course is suitable for those interested in a career as a professional financial planner or advisor in the financial services industry (with an insurance company, an independent financial services practice, or in the banking sector). It is also intended for those interested in a career as a wealth manager, broker, consultant, insurance specialist or customer relationship manager.

Human resource management: This leads to non-statutory registration as a human resource practitioner with the South African Board for People Practices. Follow a career as a personnel manager, market researcher, training manager, consultant or labour relations manager. (For statutory registration as a psychometrist or industrial psychologist, see BCom (Industrial Psychology).)

*Information systems management:* Knowledge technologies are integrated with organisational strategies and processes to enhance productivity, efficiency and (sometimes) innovation.

Investment Management: For those who are interested in a career as an investment manager, investment analyst, stockbroker, portfolio manager or asset manager at an investment management firm, major corporation, trust, or foundation.

Logistics Management: A logistics manager plans and controls the efficient, effective flow and storage of goods, services and related information from the place of origin to the place of consumption. Positions in this field include Sourcing Analyst, Export Coordinator, Demand Planner, Contract Manager, Supply and Logistics Manager, Project Operations Manager, and Operations Director.

*Marketing management*: In this field, you will be engaged in various marketing activities such as product decisions, price determination, distribution, advertising and creating awareness of products or services. Possible careers are marketing manager, sales manager, client manager and advertising manager.

Public and development management: Management careers in the public, non-government and development sectors such as general, strategic, financial, personnel, project or programme manager. Development planner, community developer or a specialist in policy and management research and consultation.

## BCom (Management Sciences) Extended Curriculum Programme (ECP) (4 years)

This programme is offered over four years. You must meet the minimum admission requirements and you will get preference if you also meet the socio-economic status (SES) requirements of the

University's admission policy and the SES level determined by the University. Approximately 100 students can be accommodated in the programme each year.

- An NSC aggregate of at least **60**% (excluding Life Orientation)
- Mathematics 50%
- English Home Language 50% OR
- Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

## **BCom (Mathematical Sciences) (3 years)**

- An NSC aggregate of at least **70**% (excluding Life Orientation)
- Mathematics 75%
- English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

#### Focal areas

- Data Science
- Financial Risk Management
- Operations Research

Similar programmes: Bachelor of Data Science (BDatSci); BSc in Computer Science; BEng; BSc in Physics; BSc in Mathematical Sciences; BSc with focal area Bioinformatics and Computational Biology, or Biomedical Mathematical Sciences.

#### Career opportunities:

Data Science: Data Science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from data in various forms, both structured and unstructured. Artificial intelligence, machine learning, big data - these concepts are at the core of data science. With the deluge of data, comes the increasing need for people to make sense of the data. Studies have shown that statistical analysis and data acumen are some of the top skills in demand globally at the moment, and that demand far outstrips supply.

Financial risk management: People with training in financial risk management, mathematical statistics and financial mathematics are appointed by large financial institutions as financial quantitative analysts, such as financial risk managers, portfolio managers and financial instrument dealers.

*Operations research:* This practice-oriented focal area finds mathematically-based solutions for problems that have a high degree of complexity, uncertainty and conflict in factories, businesses, banks, and the mining and agricultural sectors.

#### **BCom (International Business) (4 years)**

A limited number of students are selected using a special selection process. The BCom (International Business) programme is a strict selection programme with set criteria that have to be met to proceed from one academic year to the next. The third year includes an international exchange semester. The language of instruction is English.

- An NSC aggregate of at least 80% (excluding Life Orientation)
- Mathematics 70%
- English Home Language 70% OR English First Additional Language 80%
- Any Additional Language 70%

Similar programme: BCom Management Sciences

Career opportunities: Interaction with international students and the global marketplace prepares you for a role in international firms as a marketing manager, financial manager, entrepreneur or innovation manager.

## **Bachelor of Data Science (BDatSci) (4 years)**

An aggregate of at least 80% (excluding Life Orientation)
Mathematics 80%

- Home Language 60%
- If English is not the home language, English First Additional Language **75**%

#### Focal areas

- Analytics and Optimisation
- Behavioural Economics
- Statistical Learning

Similar programme: BCom (Mathematical Sciences) Focal Area: Data Science

#### Career opportunities:

Analytics and Optimisation: Operations research is an analytical approach to data-driven problem-solving and decision-making. Problems are broken down into basic components and then solved in defined steps by mathematical methods. Operations researchers use mathematical optimisation to determine the best performance under the given circumstances. They use simulation to experiment and test solutions before implementing them and analytics to uncover risks and helpful insights, and to make reliable predictions. The techniques presented in this focal area give data scientists a unique edge in finding optimal solutions to real-world problems, and they open doors to careers in areas like business analysis and consulting.

Behavioural Economics: Data scientists often work with data that capture aspects of human behaviour and reflect decisions made by investors, consumers, workers, politicians, companies and managers. Behavioural economics investigates how psychological and economic factors affect these decisions. This focal area will equip you with the skills, models and theories to understand, predict and influence human behaviour.

Statistical Learning: In almost all environments, decision-making is driven by massive amounts of data, which means that there is a dire need for skilled individuals who can make sense of this data deluge. In general, data science entails the gathering and storage of data, the transformation and graphical representation of data and the analysis of data to make predictions or inferences. The statistical learning focal area entails identifying trends and patterns in data and using these to construct statistical models, which can be used to predict or classify. This is an important task across all industries, meaning that individuals with these particular skills can work on solving real-world problems found in a variety of domains.

## DEGREE PROGRAMMES FOR PROFESSIONAL REGISTRATION

#### **BCom (Actuarial Science) (3 years)**

Should the applicants who meet the admission requirements exceed the capacity of the Faculty's enrolment plan, the criteria of the admission requirements will be used to rank the applicants in order of suitability and to finalise the list of selected applicants. If more applicants meet the admission requirements than the capacity of the Faculty's enrolment plan allows, further selection criteria and processes will be applied.

- An NSC aggregate of at least **80**% (excluding Life Orientation)
- Mathematics 80%
- Home Language 60%
- If English is not the home language, English First Additional Language 75%

 $\textbf{Similar programme:} \ \mathsf{BCom} \ \mathsf{Mathematical} \ \mathsf{Sciences}$ 

Career opportunities: To become an Actuary (Fellow of the Actuarial Society of South Africa) you need to pass the fifteen examinations of the professional body and have sufficient work experience. Successful university studies may result in exemptions from many of these examinations.

## BCom (Industrial Psychology) (3 years)

- An NSC aggregate of at least **65**% (excluding Life Orientation)
- Mathematics 60%

 English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

**Similar programmes:** BCom (Management Sciences): Focal Area Human Resource Management. A BA degree with Psychology and Industrial Psychology up to third-year level.

Career opportunities: Statutory registration with the Health Professions Council of South Africa (HPCSA) as a psychometrist (independent practice) is possible after obtaining the BCom (Industrial Psychology) and BComHons (Industrial Psychology) degrees, an internship of six months and passing a professional board exam. Statutory registration with the Health Professions Council of South Africa (HPCSA) as a Psychometrist or Industrial Psychologist is possible after further studies, an internship and passing the relevant professional board exam.

## BAcc (3 years)

- An NSC aggregate of at least 70% (excluding Life Orientation)
- Mathematics 70% OR Mathematics 60% and Accounting 70%
- English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

**Similar programmes:** BCom Financial Accounting or BCom Management Accounting

Career opportunities: The BAcc degree is your first step towards becoming a Chartered Accountant. To obtain the professional qualification of Chartered Accountant, you must pass the examinations of the South African Institute of Chartered Accountants (SAICA) and/or the Independent Regulatory Board for Auditors (IRBA). A chartered accountant can work as an auditor for an auditing firm. This profession has statutory protection. Other jobs in financial management, management accounting or tax consulting may also be considered.

## **BCom (Management Accounting) (3 years)**

- · An NSC aggregate of at least 65% (excluding Life Orientation)
- Mathematics 60%
- English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

Similar programmes: BAcc; BCom (Financial Accounting)

Career opportunities: To obtain the internationally recognised professional qualification of chartered management accountant, you must pass the examinations of the Chartered Institute of Management Accountants (CIMA, London). Chartered management accountants focus on financial competencies and interpret and use financial information in the management of a business.

#### **BCom (Financial Accounting) (3 years)**

- An NSC aggregate of at least 65% (excluding Life Orientation)
- Mathematics 60%
- English Home Language 50% OR Afrikaans Home Language 50% OR Afrikaans First Additional Language 60% OR English First Additional Language 60%

Similar programmes: BAcc; BCom (Management Accounting)

Career opportunities: To obtain the internationally recognised professional qualification of chartered certified accountant, you must pass the examinations of the Association of Chartered Certified Accountants (ACCA, London). Certified accountants prepare financial statements, do internal auditing and give advice on business and taxation matters.

## **FACULTY OF EDUCATION**

#### Admission and selection

- An aggregate of at least **60%** for the NSC, IEB or an equivalent school-leaving certificate (excluding Life Orientation)
- Mathematics 40% OR Mathematical Literacy 60% AND
  - Learners who were taught in English:
- English Home Language 60%
- Afrikaans OR isiXhosa (Home Language or First Additional Language) 50%
  - OR
  - Learners who were taught in Afrikaans:
- Afrikaans Home Language 60%
- English OR isiXhosa (Home Language or First Additional Language) **50**%
  - Learners who were taught in isiXhosa:
- IsiXhosa Home Language 60%
- English OR Afrikaans (Home Language or First Additional Language) 50%

BEd (Intermediate Phase Education): Further requirements depend on the school subjects that you want to teach.

## **BEd (Foundation Phase Education) (4 years)**

#### 125 places in the programme.

**Career opportunities:** Teacher for Grades R to 3. Postgraduate Studies: See the Education calendar on the website www.sun.ac.za. Consider becoming a language practitioner, editor or proofreader if you have an interest in languages.

#### **BEd (Intermediate Phase Education) (4 years)**

#### 125 places in the programme.

Mathematics (Ed) is compulsory (in the first year), and you may choose two additional teaching subjects from the following teaching modules (note the additional admission requirements for some teaching modules):

- Mathematics (pass with 60% average in the first year)
- Life Skills
- Natural Sciences (Ed)
  - Life Sciences or Physical Sciences 50%
- Social Sciences (Ed)
  - History or Geography 50%

Career opportunities: Primary school teacher for Grades 4 to 7 with the competence to teach two intermediate school subjects and two languages. Postgraduate Studies: See the Education calendar on the website www.sun.ac.za. Consider becoming a language practitioner, editor or proofreader if you have an interest in languages.

## Postgraduate Certificate in Education (PGCE) (1 year)

Choose one or preferably two subjects as teaching modules. All teaching modules are not available every year. A minimum number of students per teaching module is required.

- A degree from one of the other faculties with one or two school subjects. See www.maties. com > What can I study? > Undergraduate > Education
- For the PGCE teaching modules and their requirements, see the Faculty of Education Calendar on www.maties.com > Resources > University Yearbooks/Calendars.

Career opportunities: High school teacher in two subjects (or in one subject with additional study in this subject). Specialising with further study as for BEd above. Remedial teacher (HonsBEd and MEd in Educational Support). Educational Psychology (MEd (Psig)).

## **FACULTY OF ENGINEERING**

The BEng programmes have been accredited by the Engineering Council of South Africa (ECSA). Therefore, after acquiring the relevant experience in practice, graduates may register as Professional Engineer.

#### Admission and selection

- An NSC aggregate of at least **70**% (excluding Life Orientation)
- Mathematics 70%
- Physical Sciences 60%
- English Home Language 50%, with no Afrikaans requirement, OR English First Additional Language 60%, with no Afrikaans requirement, OR English First Additional Language 50% with Afrikaans Home Language 50% OR English First Additional Language 50% with Afrikaans Second Additional Language 60%
- Applicants are also subject to selection according to selection criteria

According to the Faculty's selection guidelines, your selection mark is calculated by using the marks (out of 100) of your Grade 11 subjects (for conditional selection) or Grade 12 subjects (for final selection) as follows:

## Selection mark = Mathematics percentage + Physical Sciences percentage + (6 x Matric average)

The Matric average is calculated from the six best Matric subjects' percentages (excluding Life Orientation). The maximum score is 800. Note that Mathematics and Physical Sciences normally also contribute to the average.

Over the last few years, a selection mark of 600 or more gave students a good chance of admission to certain programmes, but in others, 620 or more were required. In other words, to have a reasonable chance of selection for some programmes, your mark for Mathematics, as well as your NSC average, should be above 75, and Physical Sciences above 65, while for other programmes a Mathematics mark of at least 80, together with a Physical Sciences mark of at least 70, will be needed. You can apply to more than one programme.

#### **BEng programmes**

## BEng (Chemical) (4 years)

Career opportunities: Chemical engineers specialise in the largescale operation of processes by which various consumer products are produced, such as chemicals, pharmaceutical products, fertilisers, fuels, metals and other materials. They are also involved where effluents and waste materials are processed and recycled.

#### BEng (Civil) (4 years)

Career opportunities: Civil engineers are responsible for large, permanent works such as irrigation systems, bridges, dams, harbours, canals, airports, roads and streets, pipelines, sewerage systems, railways, structures of various kinds and structure foundations, stormwater systems, tunnels, towers, water supply systems, and various kinds of heavy construction work.

## **BEng (Electrical and Electronic) (4 years)**

Career opportunities: Electrical engineers are responsible for the generation, transmission and conversion of electrical energy for example factories and municipalities. Electronic engineers focus on the control of robotic systems; the collection, processing and dissemination of information by computer and communication networks, such as cell phone networks; and the design of computers and large software systems.

## BEng (Electrical and Electronic) (Data Engineering) (4 years)

Career opportunities: Data Analyst, Data Engineer

## BEng (Industrial) (4 years)

Career opportunities: The main branches of Industrial Engineering are manufacturing technology and operational systems design. It involves facets that are important in modern industrial and service environments, such as quality assurance, robotics, engineering economics, operations research, industrial ergonomics and information technology.

## BEng (Mechanical) (4 years)

Career opportunities: Mechanical engineering is characterised by the motion and transfer of energy, for example in vehicles, aeroplanes, vessels, missiles, cooling systems, power stations and engines, but also includes machines used in all branches of the economy, such as process plants and manufacturing industries.

## **BEng (Mechatronic) (4 years)**

Career opportunities: Mechatronic engineers focus on systems characterised by close integration of mechanical components, electronic sensors, mechanical and electrical actuators and computer controllers. Examples of mechatronic systems include electronic engine control systems, robot systems and automated assembly lines.

#### Extended curriculum programmes (ECPs) (5 years)

All our BEng programmes are also available as ECPs, which require one extra year of study. A limited number of applicants who meet the minimum requirements of the BEng ECPs will be selected. Selection considers the selection score as above and the socioeconomic status of applicants to give preference to candidates from underserved educational backgrounds.

## **FACULTY OF LAW**

#### Admission and selection

Selection is based on final Grade 11 (or if available final Grade 12 results) and the National Benchmark Test results in an 80:20 ratio.

## LLB (four-year)

120 places in the programme.

- Write the NBTs AQL before 31 July
- An aggregate of at least 70% (excluding Life Orientation) in the NSC or IEB school-leaving certificate
- English or Afrikaans Home Language 60% OR Afrikaans or English First Additional Language 70%
   If you wish to take Economics as a university subject, then also:
- Mathematics 60%

If you wish to take a university subject from another faculty, please make sure that you meet its requirements.

Similar programmes: BAccLLB, BA (Law), BCom (Law)

Career opportunities: Legal practitioner (attorney or advocate) after having completed the prescribed practical training and passing the entrance examinations set by the profession; Judge (Magistrate, Regional Magistrate, High Court Judge, Appeal Court Judge, Constitutional Court Judge); Public Prosecutor; Deeds Office examiner or registrar; Master of the High Court clerk or registrar; Legal advisor (in-house legal counsel); Compliance manager; Mediator or arbitrator; Public Protector; Academic (lecturer); Nongovernmental organisation (NGO) work.

There are a multitude of other career options for law graduates, some examples include: Entrepreneur; Business manager; Journalist; National or provincial government.

## LLB (three-year)

#### 50 places in the programme.

Only available as a second bachelor's degree, selection is based on performance in the prior bachelor's degree.

- · Any bachelor's degree from a South African university
- · An aggregate of at least 60% in the final year

## BA (Law) (3 years)

## 55 places in the programme.

Interfaculty programme: You take modules from the Faculty of Law and the Faculty of Arts and Social Sciences.

- Write the NBTs AQL before 31 July
- An aggregate of at least 70% (excluding Life Orientation) in the NSC or IEB school-leaving certificate
- English or Afrikaans Home Language 60% OR Afrikaans or English First Additional Language 70%
   If you wish to take Economics as a university subject, then also:
- Mathematics 60%

If you wish to take a university subject from another faculty, please make sure that you meet its requirements.

#### Similar programmes: LLB, BAccLLB, BCom (Law)

Career opportunities: The degree enriches one's understanding of languages, human behavior and social issues. The BA (Law) degree also provides entry to the 2-year LLB degree, which you must complete if you wish to become a legal practitioner (attorney or advocate).

#### BCom (Law) (3 years)

#### 80 places in the programme.

Interfaculty programme: You take modules from the Faculty of Law and the Faculty of Economic and Management Sciences.

- Write the NBTs AQL and MAT before 31 July
- An aggregate of at least 70% (excluding Life Orientation) in the NSC or IEB school-leaving certificate

- English or Afrikaans Home Language 60% OR Afrikaans or
- English First Additional Language 70%
- Mathematics 60%

#### Similar programmes: LLB, BAccLLB, BA (Law)

Career opportunities: The degree provides the necessary background for a career in the business world and commercial law. The BCom (Law) degree also provides entry to the 2-year LLB degree, which you must complete if you wish to become a legal practitioner (attorney or advocate).

#### **BAccLLB (5 years)**

#### 35 places in the programme.

Interfaculty programme: You take modules from the Faculty of Law and the Faculty of Economic and Management Sciences.

- Write the NBTs AQL and MAT before 31 July.
- An aggregate of at least 80% (excluding Life Orientation) in the NSC or IEB school-leaving certificate.
- English or Afrikaans Home Language 60% OR Afrikaans or English First Additional Language 70%
- Mathematics 70% OR Mathematics 60% and Accounting 70%

#### Similar programmes: LLB, BAccLLB, BCom (Law), BA (Law)

Career opportunities: The BAccLLB degree is unique, combining two degrees. Graduates can therefore choose to pursue a career in either law or accounting or any related field. The LLB enables you to enter the legal profession, after having completed practical training and passed the prescribed examinations. The BAcc gives you access to an Honours or PG Dip in Accounting, which, among others, is required for becoming a chartered accountant.

# FACULTY OF MEDICINE AND HEALTH SCIENCES

Our programmes are accredited for professional registration by bodies such as the Health Professions Council of South Africa (HPCSA) and the South African Nursing Council (SANC).

#### Admission and selection

All applicants must meet the minimum requirements of the programme they apply for. Applicants are considered according to the following categories:

- Current learners (Grade 12) and applicants who have completed school are selected for these programmes on the grounds of their academic merit.
- Registered university students (MBChB only considers registered SU students) are considered based on academic and non-academic merits as outlined in the selection guidelines of each programme.
- Applicants with tertiary qualifications and / or work experience are considered based on academic and non-academic merits as outlined in the selection guidelines of each programme.

## MBChB (6 years)

## ±300 candidates are selected annually.

- An aggregate of at least 75% for the NSC or an equivalent qualification (excluding Life Orientation)
- Mathematics 60%
- Physical Sciences 50%
- Life Sciences 50%

**Similar programmes:** Refer to the admission and selection requirements. www.maties.com > Apply > Admission and Selection Requirements.

Career opportunities: After an internship of two years and a community service year, you will be eligible to register at the HPCSA in the category Independent Medical Practitioner.

## **Bachelor of Nursing (4 years)**

#### ±50 candidates are selected annually.

- An aggregate of at least 60% for the NSC or an equivalent qualification (excluding Life Orientation)
- Mathematics 40% OR Mathematical Literacy 70%
- Life Sciences 50%

**Similar programmes:** BSc in Dietetics; Bachelor of Occupational Therapy; BSc in Physiotherapy and Bachelor of Speech-Language Therapy

**Career opportunities:** After a year of community service, you may register with SANC as a Nurse and Midwife.

## BSc in Dietetics (4 years)

#### ±35 candidates are selected annually.

- An aggregate of at least 60% for the NSC or an equivalent qualification (excluding Life Orientation)
- Mathematics 50%
- Physical Sciences 50%
- Life Sciences 50%

**Similar programmes:** BSc in Food Science; BSc in Molecular Biology and Biotechnology; Bachelor of Occupational Therapy; BSc in Physiotherapy.

**Career opportunities:** After a year of community service, you may register at the HPCSA as a Dietitian.

#### **Bachelor of Occupational Therapy (4 years)**

#### ±50 candidates are selected annually.

- An aggregate of at least 60% for the NSC or an equivalent qualification (excluding Life Orientation)
- Mathematics 40%
- Life Sciences 50%

**Similar programmes:** BSc in Physiotherapy; Bachelor of Nursing, BSc in Dietetics; BSc in Human Life Sciences; BA in Sport Science; BSc in Sport Science.

**Career opportunities:** After a year of community service, you may register at the HPCSA as an Occupational Therapist.

### **BSc in Physiotherapy (4 years)**

#### ±55 candidates are selected annually.

- An aggregate of at least 60% for the NSC or an equivalent qualification (excluding Life Orientation)
- Mathematics 50%
- Physical Sciences **50**%
- Life Sciences 50%

Similar programmes: BA in Sport Science; BSc in Sport Science; BSc in Human Life Sciences; Bachelor of Nursing; Bachelor of Occupational Therapy

**Career opportunities:** After a year of community service, you may register at the HPCSA as a Physiotherapist.

## **Bachelor of Speech-Language Therapy (4 years)**

#### ±30 candidates are selected annually.

- An aggregate of at least 60% for the NSC or an equivalent qualification (excluding Life Orientation)
- Physical Sciences OR Life Sciences 50%
- At least TWO of the following THREE languages (Home Language or First Additional Language) 60%: English AND/OR Afrikaans AND/OR a third South African language.

**Similar programmes:** Bachelor of Occupational Therapy; BSc in Physiotherapy; BSc in Human Life Sciences.

**Career opportunities**: After a year of community service, you may register at the HPCSA as a Speech-Language Therapist.

## **FACULTY OF SCIENCE**

Students are encouraged to follow up a three-year BSc degree with an Honours degree. This will enable you to gain recognition and registration (where relevant) as a professional scientist and will broaden your career opportunities. All the undergraduate programmes offered in the Faculty of Science lead to postgraduate programmes in the Faculty of Science; or in some of the other faculties.

For more information on postgraduate programmes, please consult the University's Postgraduate Prospectus at https://www.sun.ac.za/english/pgstudies/.

## Admission and selection

According to the Faculty's selection guidelines, your selection mark is calculated by using your final Grade 11 results (for conditional admission) or Grade 12 final school-leaving results (for final selection) as follows:

#### Selection mark:

[(Mathematics x 2) \* 5 other subjects (of which at least one must be English or Afrikaans; excluding Life Orientation)] ÷ 7

Note on admission requirements for Mathematics\*\*

The mathematics requirement for a programme depends on your choice of subjects in your first year at university.

- If you take Mathematics and Physics as first-year subjects: Mathematics 70%
- If you take Mathematics (Bio) and Physics (Bio) as first-year subjects: Mathematics 60%

## PROGRAMMES IN THE BIOLOGICAL SCIENCES

#### BSc in Biodiversity and Ecology (3 years)

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 60%

Similar programmes: BSc with focal area Biomathematics; BSc in Conservation Ecology; BScAgric in Plant and Soil Sciences, BScAgric in Animal Production Systems.

Career opportunities: botanist, zoologist, plant biotechnologist, conservation scientist, forensic scientist, marine scientist, environmental assessment practitioner, conservation technician, ecologist, laboratory analyst, environmental consultant, environmental impact expert, land-use planner, agricultural advisor, environmental educator, life sciences teacher (after completion of Postgraduate Certificate in Education).

## **BSc in Human Life Sciences (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 60% or 70% (depending on your choice of firstyear Mathematics and Physics) \*\*

#### Focal areas (you choose one)

- Biology
- Biology with Psychology

Similar programmes: BSc in Molecular Biology and Biotechnology; BSc with focal area Applied Medicinal Chemistry, or focal area Biomedical Mathematical Sciences.

Career opportunities: forensic scientist, physiologist, stem cell researcher, laboratory analyst, medical representative, biomedical scientist, exercise physiologist, nutritionist, clinical researcher, biochemist, human geneticist, forensic or clinical psychologist (with the necessary postgraduate qualification), life sciences teacher (after completion of Postgraduate Certificate in Education), anthropometrist, biotechnologist: work on human cells, development of new medicines, science journalist (with the necessary postgraduate qualification).

## BSc in Molecular Biology and Biotechnology (3 years)

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 60% or 70% (depending on your choice of firstyear Mathematics and Physics) \*\*

Similar programmes: BSc in Human Life Sciences, BSc in Chemistry, BSc with focal area Applied Medicinal Chemistry, or focal area Bioinformatics; BScAgric in Viticulture and Oenology.

Career opportunities: plant biotechnologist, forensic scientist, marine scientist, environmental assessment practitioner, laboratory analyst, food inspection analyst, biochemist, geneticist, life sciences teacher (after completion of Postgraduate Certificate in Education), biofuel developer, microbiologist, biotechnologist: work on cells, yeasts, bacteria, fungi, and viruses to develop disease-free plants, new medicines, or enzymes useful in industry or mining, water analyst.

#### **BSc in Sport Science (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 60%

**Similar programmes:** BA in Sport Science; BSc in Human Life Sciences, BSc in Physiotherapy.

Career opportunities: sport coach, sport manager, sport scientist, sport physiologist, work with persons with disabilities, fitness instructor, biokineticist (with the necessary postgraduate qualification), personal trainer, teacher (after completion of Postgraduate Certificate in Education).

#### PROGRAMMES IN THE PHYSICAL SCIENCES

## **BSc in Chemistry (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) **50**%
- Physical Sciences 50%
- Mathematics 70%

#### Focal areas (you choose one)

- Chemistry and Polymer Science
- Chemical Biology
- Materials Technology

Similar programmes: BSc in Molecular Biology and Biotechnology; BSc with focal area Applied Medicinal Chemistry; BSc in Earth Science; BSc in Food Science.

Career opportunities: research scientist, quality assurance manager, disaster management officer, analytical chemist, toxicologist, pharmacologist, careers in the packaging, paint, adhesives and textile industries, as well as in the manufacturing sector or with suppliers of raw materials, careers concerned with the planning and operation of chemical plants, the development of analytical methods and production processes, marketing of chemicals and scientific instruments, environmental scientist, forensic analyst, manufacturer of pesticides, pharmaceutical products, cosmetic and fragrance products, chemist working in process and quality control of raw materials and manufactured products, product developer (prostheses, sportswear, sports equipment, protective clothing), textile scientist (medical textiles, industrial textiles, microfibres, nanofibres), technical sales manager, production manager, quality manager, buyer, physical sciences teacher (after completion of Postgraduate Certificate in Education), patent lawyer (with the necessary postgraduate qualification).

## **BSc in Earth Science (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 60% or 70% (depending on your choice of firstyear Mathematics and Physics) \*\*

#### Focal areas (you choose one)

- Applied Earth Science
- Geo-environmental Science

**Similar programmes:** BSc in Biodiversity and Ecology; BSc in Chemistry; BScAgric in Plant and Soil Sciences.

Career opportunities: environmental consultant, groundwater specialist, geotechnical geologist, soil scientist, land-use rehabilitator, geologist, mining geologist, environmental rehabilitation engineer, exploration consultant, environmental geochemist, seismologist, rock expert, marine geologist, applied mineralogist, volcanologist, geophysicist.

## BSc in GeoInformatics (3 years)

- An aggregate of at least **65**% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 60% or 70% (depending on your choice of firstyear Mathematics and Physics) \*\*

**Similar programmes:** BSc in Earth Science; BSc in Computer Science, BA in Development and the Environment.

Career opportunities: chief spatial information officer, geospatial information integrator, remote sensing specialist, meteorologist, GIS (Geographic Information Systems) technician, transportation planning, cartography, map designer, geospatial software engineer, climatologist, earth observation analyst, earth observation (remote sensing) specialist working for environmental consultancy groups, planning and engineering firms, programme development and computer consultancy groups on all levels of government involved in resource and infrastructure management, agencies concerned with natural and human resource development programmes, mineral exploration and mining.

## **BSc in Physics (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Physical Sciences 50%
- Mathematics 70%

#### Focal areas (you choose one)

- Laser Physics (Physical), Nuclear Physics, Radiation and Health Physics
- Laser Physics (Biological)
- Theoretical Physics

**Similar programmes:** BSc in Chemistry, BSc in Mathematical Sciences with focal area: Applied Mathematics,

Career opportunities: radiation protection practitioner, medical physicist, nanotechnologist, data analyst, physical sciences teacher (after completion of Postgraduate Certificate in Education), geophysicist, medical industry, air quality assessor, atmospheric modeller, forensic physicist, research opportunities at the iThemba Laboratory for Accelerator-based Sciences (iThemba LABS) and industries such as Eskom, the CSIR, Sasol, the SABS, a career in industries such as optical systems, communication (optical fibres), ecology (pollution monitoring), criminology (forensic science), defence (control and communication), nuclear power stations and mines, work in the broad fields of information technology, geology, biological and financial sector, astrophysicist, cosmologist.

### PROGRAMMES IN THE MATHEMATICAL SCIENCES

#### **BSc in Mathematical Sciences (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Mathematics 70%

  If you take Chemistry or Physics as a compulsory or elective university subject:
- Physical Sciences 50%

#### Focal areas (you choose one)

- Abstract Mathematics
- Applied Mathematics
- Mathematics
- Operations Research

Similar programmes: BSc in Computer Science; BEng; BSc in Physics; BCom in Mathematical Sciences

## **BSc in Computer Science (3 years)**

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Mathematics 70%
  - If you take Chemistry or Physics as a compulsory or elective university subject:
- Physical Sciences 50%

#### Focal areas (you choose one)

- General Computer Science
- Computer Systems
- Data Science
- Computer Science with Genetics
- Computer Science with Geographic Information Technology

Similar programmes: BSc in Mathematical Sciences; BEng; BSc in Physics, BSc in GeoInformatics; BSc with focal area Bioinformatics and Computational Biology, BCom in Mathematical Sciences; BDatSci

#### Career opportunities (programmes in the Mathematical

Sciences): actuarial analyst, quantitative analyst, credit analyst, risk manager, risk product developer, business intelligence analyst, forensic computer analyst, computer systems analyst, database administrator, financial analyst, mathematician, operations research analyst, acoustic consultant, data analyst, investment analyst, software tester, games designer and developer, CAD designer, financial manager, mathematics teacher (after completion of Postgraduate Certificate in Education), operations researcher, supply chain analyst, data scientist, lecturer, researcher in interdisciplinary scientific fields which rely more on structural mathematics rather than analytical mathematics, consultant in the engineering industry, programmer, expert in the modelling of dynamic processes, image processing, numerical methods and flow modelling in banking or the engineering or computer industry, careers requiring sophisticated quantitative skills, such as in the banking, investment and insurance sectors, process or system optimiser, logistics expert in the transportation and provisioning sectors, project developer, planner, also application possibilities in company farming, mining, forestry, the manufacturing sector, product marketing, systems designer, software developer in the security and banking industries, network specialist, designer of mobile applications for smartphones and tablets, 3D animator for the film industry.

## **INTERDISCIPLINARY PROGRAMMES**

#### BSc (3 years)

- An aggregate of at least 65% for the NSC (excluding Life Orientation)
- Afrikaans OR English (Home Language or First Additional Language) 50%
- Mathematics 70%
- Physical Sciences 50%

#### Focal areas (you choose one)

- Biomedical Mathematical Sciences
- Applied Medicinal Chemistry
- Bioinformatics and Computational Biology
- Biomathematics

## Bachelor of Data Science (BDatSci) (4 years)

This is an interfaculty programme.

- An aggregate of at least **80**% for the NSC (excluding Life Orientation)
- Mathematics 80% PLUS one of the following:
- Afrikaans Home Language 60% OR
- English Home Language 60% OR
- Afrikaans First Additional Language 75% OR
- English First Additional Language **75**%

#### Focal areas (you choose one)

- Computer Science
- Applied Mathematics
- Statistical Physics

Similar programmes: BSc in Computer Science; BEng; BSc in Physics; BSc in Mathematical Sciences; BSc with focal area Bioinformatics and Computational Biology, or Biomedical Mathematical Sciences, BCom in Mathematical Sciences.

Career opportunities (Interdisciplinary Programmes): analyst, development chemist, research assistant, onsite chemist, medical chemist, data scientist, machine learning engineer, machine learning scientist, applications architect, business intelligence (BI) developer, statistician, data analyst, medical science liaison, pharmaceutical scientist, clinical trial associate, regulatory affairs specialist, pharmacovigilance officer, quality assurance specialist, medical representative, medical epidemiologist, biomedical engineer, personalised medicine analyst, researcher in systems biology.

#### **Extended Curriculum Programmes (ECPs)**

BSc programmes in the biological, physical or mathematical sciences are also available as extended curriculum programmes (ECPs) and this results in one extra year of study with a special curriculum in the first year.

Minimum admission requirements for the BSc (extended curriculum programmes):

An applicant who accepted a conditional offer for a programme in the Faculty of Science, but whose school-leaving results do not meet the minimum admission requirements of that programme, be considered for an extended curriculum programme; provided that the applicant:

- has not been registered previously at Stellenbosch University or any other higher education institution; and
- complies with the socio-economic status (SES) requirements of the University's Admission Policy; and
- · falls into one of the following categories:

## Minimum admission requirements – National Senior Certificate (NSC) and International Examination Board (IEB)

A final mark of at least 4 (50%) in Afrikaans or English (Home Language or First Additional Language)

Comply with **one** of the following **three combinations**:

#### **Biological Sciences**

Combination 1	Combination 2	Combination 3
Mathematics 5 (≥60%)	Mathematics 5 (≥55%)	Mathematics 5 (≥60%)
Physical Science 4 (≥50%)	Physical Science 4 (≥50%)	Physical Science 4 (≥45%)
Average (without LO*) ≥60%	Average (without LO*) ≥ <b>65</b> %	Average (without LO*) ≥ <b>65</b> %

## **Physical and Mathematical Sciences**

Combination 1	Combination 2	Combination 3
Mathematics 6 (≥70%)	Mathematics ≥ <b>65</b> %	Mathematics 6 (≥70%)
Physical Science 4 (≥50%)	Physical Science 4 (≥50%)	Physical Science ≥ <b>45</b> %
Average (without LO*) ≥60%	Average (without LO*) ≥ <b>65</b> %	Average (without LO*) ≥ <b>65</b> %

## **FACULTY OF THEOLOGY**

## BTh (Bachelor of Theology) (3 years)

An NSC aggregate of at least 60% (excluding Life Orientation)

Similar programmes: BDiv (Bachelor of Divinity); Bachelor of Social Work

Career opportunities: Become a youth worker, counsellor or community worker.

#### BDiv (Bachelor of Divinity) (4 years)

An NSC aggregate of at least 60% (excluding Life Orientation)

Similar programmes: BTh (Bachelor of Theology)

Career opportunities: First step in ministerial training. To become a minister in the Dutch Reformed Church (DRC) or Uniting Reformed Church (URC) complete the BDiv and the MDiv. DRC candidates also need to obtain the Postgraduate Diploma in Theology (Christian Ministry). Presbyterian, Anglican and Volkskerk ministry candidates are trained further by their denominations.

#### Extended Curriculum Programme (+1 year)

Candidates for the BTh and the BDiv may come into consideration for the extended curriculum programme.

- An NSC aggregate of at least 55% but below 60% (excluding Life Orientation)
- · An interview with the Dean or a representative, if required.
- This is a selection programme as limited spaces are available

#### Indemnity

The University reserves the right to adjust the information in this brochure at any time and as the need arises. This information may therefore be incomplete or out of date. The information is given here to the best of our knowledge and as accurately and fully as possible at the time of going to press in December 2023. Verifying the given information remains the responsibility of the prospective student. The latest information is available on www.maties.com and at the telephone numbers given in this brochure.

## STAY UP TO DATE

www.maties.com

## Follow us

Facebook: www.facebook.com/stellenboschuniversity
Twitter: @StellenboschUni
Instagram: www.instagram.com/stellenboschuni
YouTube: www.youtube.com/user/StellenboschUni



Apply at Stellenbosch University



Accommodation



Financial Aid



Fees

## Client Service Centre

Telephone: +27 21 808 9111 Fax: +27 21 808 3822 E-mail: info@sun.ac.za

> Private Bag X1 Matieland, 7602 South Africa