

2023 ADMISSION GUIDE Faculty of Agriculture, Engineering and Natural Sciences

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SCHOOL OF ENGINEERING AND THE BUILT ENVIRONMENT

The School of Engineering and the built environment is located at the Jose Eduardo dos Santos Campus of the University in Ongwediva, northern Namibia. The School offers the degree of Bachelor of Science in Engineering with Honours in six engineering disciplines namely: BSc in Civil Engineering, BSc in Electronics and Computer, BSc of Science in Electrical Engineering, BSc in Mechanical Engineering, MSC in Mining Engineering and BSC in Metallurgical Engineering. All the degree programmes have been approved by the Engineering Council of Namibia and by the Namibia Qualifications Authority (NQA) and are registered in the National Qualifications Framework (NQF) as professional Engineering Degrees with Honours at NQF Level 8.

Admission Requirements to all of the School of Engineering undergraduate Degrees - First Year of Engineering:

For the minimum entry requirements for admission into the First Year of Engineering, candidates must be in possession of a valid Namibian Senior Secondary Certificate (**NSSC**) or equivalent with a total of **32 points** in **five** subjects as follows:

- 3 subjects (Mathematics, Physics and Chemistry) on NSSCAS level with an average grade of "c" in each subject or higher
- Students interested in Metallurgical can have Chemistry on AS/AL without Physics.
- 2 subjects on NSSCO level with "C" average or higher, including English.

OR

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSCH) or equivalent with a total of **32 points** in **five** subjects as follows:

- 2 subjects (Mathematics and Physical Science) on NSSCH level with an average grade of "2" in each subject or higher
- 3 subjects on NSSCO level with "C" average or higher, including English.

Admission Requirements to Engineering - Extended program

The Minimum entry requirements for admission into the Engineering Extended program, is **27 points** in the best five subjects: Required **2** Subjects on Advanced Subsidiary Level are:

- 2 subjects (Mathematics, Physics / Chemistry) on NSSCAS level with an average grade of "d" in each subject or higher
- 3 subjects on Ordinary Level including English with a "C" symbol.

UNDERGRADUATE PROGRAMMES

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING HONOURS (32BHNI)

The Bachelor of Science Mechanical Engineering (Honours) builds to a level of conceptual sophistication, specialised knowledge and intellectual autonomy in accordance with requirements at NQF level 8. This programme demands a high level of theoretical engagement and intellectual independence and aims to foster deepened, comprehensive and systematic expertise in the major subject/cognate areas of learning. Through this programme, students will be equipped with cognitive and intellectual skills, key transferable skills, and professional/technical/practical skills that would enable them to demonstrate in-depth understanding of the principles of mechanical engineering. Students will be capacitated with the knowledge to design and manufacture engineering systems. The programme includes a substantial element of Work Integrated Learning and requires the conduct and reporting of supervised research in order to adequately prepare students for entry into the profession.

Exit level: NQF level 8

Duration: 4 years

Campus: Jose Eduardo Dos Santos Campus

BACHELOR OF SCIENCE IN METALLURGICAL ENGINEERING HONOURS (32BHTI)

The Bachelor of Science in Metallurgical Engineering (Honours) aims to produce multidisciplined graduate Engineers with knowledge, skills and abilities in Extractive Metallurgy, Physical Metallurgy and Materials Engineering, thus providing the potential for further professional training towards the requirements for registration as Professional Metallurgical Engineers. The programme is designed with the objective of meeting the national and regional needs for education in Metallurgical Engineering.

Exit level: NQF level 8

Duration: 4 years

Campus: Jose Eduardo Dos Santos Campus

BACHELOR OF SCIENCE IN CIVIL ENGINEERING HONOURS (32BHVI)

The Bachelor of Science in Civil Engineering (Honours) aims at producing multi-discipline graduate engineers with knowledge, skills and technical abilities in Civil Engineering and who can competently use teamwork, communication skills, along with leadership principles. Graduates from this program will be able to pursue careers in areas such as structural engineering, transportation engineering, geotechnical engineering, materials, environmental, construction, consultant, water resources engineering, NGOs and governmental positions. The programme thus provides the potential for further professional training towards the

requirements for registration as Professional Civil Engineers. The programme is designed with the objective of meeting the national and regional needs for education in Civil and Environmental Engineering.

Exit level: NQF level 8

Duration: 4 years

Campus: Jose Eduardo Dos Santos Campus

BACHELOR OF SCIENCE IN MINING ENGINEERING HONOURS (32BHMI)

The BSc. in Mining Engineering (Honours) aims at producing multi-discipline Graduate Engineers with knowledge, skills and abilities in Mining Engineering, and who can competently work in mining engineering design, mineral extraction technology, mine management, ore deposit exploitation systems, applications of mining systems, rock engineering and mine machinery and research techniques, thus providing the potential for further professional training towards the requirements for registration as Professional Mining Engineers. The qualification is designed with the objective of meeting the national and regional needs for education in Mining Engineering.

Exit level: NQF level 8

Duration: 4 years

Campus: Jose Eduardo Dos Santos Campus

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING HONOURS (32BHEI)

The Bachelor of Science in Electrical Engineering (Honours) aims at producing Graduate Engineers with knowledge, skills and abilities in electrical engineering, and who can competently work in the design, planning and operation of electric power systems and devices, power generation, transmission, distribution, control of electrical energy systems/components and related service industries, thus providing the potential for further professional training towards the requirements for registration as Professional Engineers. The programme is designed with the objective of meeting the national and regional needs for education in Electrical engineering.

Exit level: NQF level 8

Duration: 4 years

Campus: Jose Eduardo Dos Santos Campus

BACHELOR OF SCIENCE IN ELECTRONICS AND COMPUTER ENGINEERING HONOURS (32BHCI)

The BSc in Electronics and Computer Engineering (Honours) aims at producing multi-discipline Graduate Engineers with knowledge and skills in electronics and computer engineering, and who can competently work in the design, production and service of electronics and computer hardware, as well as in the information and communication technology industry, thus providing the potential for further professional training towards the requirements for registration as Professional Engineers. The programme is designed with the objective of meeting the national and regional needs for education in Electronics and Computer Engineering.

Exit level: NQF level 8

Duration: 4 years

Campus: Jose Eduardo Dos Santos Campus

None of the courses at the School of Engineering are offered on either Mature Age entry or RPL schemes.

POSTGRADUATE PROGRAMMES

MASTERS (MSc)

Admission requirements:

Prospective candidates must be in possession of a good **Level 8** Bachelor's degree with at least a **C-grade** average (i.e., **60-69%** average), or a good Postgraduate Diploma from a recognized Institution

Candidates without a Bachelor's degree or a Postgraduate Diploma from UNAM, but who hold qualifications from an approved institution of higher learning, deemed to be equivalent to a good Level 8 Bachelor's degree or a good Level 8 Postgraduate Diploma from UNAM may also be considered for admission

Prospective candidates must also satisfy specific requirements of the Faculties where they intend to enrol (e.g. teaching experience for M.Ed. admission.)

- Master of Science Civil Engineering (Transportation)
- Master of Science Mechanical Engineering (by Thesis)
- Master of Science Electrical Engineering (by Thesis)
- Master of Science Electronics and Computer Engineering (by Thesis)
- Master of Science Metallurgical Engineering (by Thesis)
- Master of Science Mining Engineering (by Thesis)
- Master of Science Civil Engineering (by Thesis)
- Master of Science Civil Engineering (Structures)

DOCTORATE (DOCTOR OF PHILOSOPHY - PHD) WITH SPECIALISATION IN:

Admission requirements:

Candidates for admission to doctoral programmes of UNAM must be in possession of a **Master's degree** or equivalent from a recognized institution of higher learning in the chosen field of study

Candidates with only the Bachelor's degree may initially be enrolled for a Master's degree by research only. If, during the first year of research they demonstrate exceptional abilities, they may be considered for upgrading into the Doctoral Programme

• Engineering

_____ Faculty of Agriculture, Engineering and Natural Sciences

SCHOOL OF AGRICULTURE AND FISHERIES SCIENCES

The school of Agriculture and Fisheries Sciences has programs at three campuses, Neudamm, Ogongo and Sam Nujoma Campuses. These campuses are strategically located and offer unique and distinct programs. Two of the campuses have farms measuring approximately 15 000 ha. Through these campuses, the school offers a unique opportunity to conduct almost all student field practicals on campuses and a further opportunity for research and community engagements in agricultural production, fisheries management, food science and agribusiness. They have various Agro-enterprises to cover the whole agriculture spectrum.

UNDERGRADUATE PROGRAMMES

BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS (31BSAE)

The degree provides students with the knowledge and appropriate skills to address current business and policy issues in Namibia and beyond. This is an entry qualification for agricultural economists who follow a primary objective to optimize profitability in agriculture and increase agricultural productivity to the benefit of society. Upon successful completion of this programme, students will be able to work as Analysts at agricultural research and financial institutions, Farm and Green Scheme Managerial Specialists, Assistant Researchers and /or Consultants, Investment Analysts, Agricultural Entrepreneurs or Practitioners, Agricultural Technical Officials, Production Assistant Specialists, Agricultural Development Practitioners, Agricultural Information Analysts and Agricultural Marketing Analysts. Students who successfully complete this four-year programme would ordinarily be able to articulate to a Master in Agricultural Economics or related cognate at NQF level 9.

Admission Requirements

A pass in **five** different subjects as follows:

- Two (2) subjects on NSSCAS level with an <u>average</u> "d" or higher including one of **Mathematics**, **Biology**, or **Agriculture**
- Three (3) subjects on NSSCO level with a "C" or higher in Mathematics, Biology and Agriculture.
- English must be a minimum "C" at the NSSCO level
- The five subjects must include English and Mathematics.

OR

A pass in **five** different subjects as follows:

- Three (3) subjects on NSSCAS level with an <u>average</u> "d" or higher including Mathematics, Biology, or Agriculture
- Two (2) subjects on NSSCO level with a "D" or higher including Mathematics, Biology and Agriculture
- English must be a minimum "C" at the NSSCO level
- The **five** subjects must include English and Mathematics.

Exit level: NQF level 7

Duration: 3 years

Campus: Neudamm Campus

BACHELOR OF AGRICULTURE IN ANIMAL SCIENCE HONOURS (31BAAS)

The degree provides students with knowledge and skills in the field of Animal Science and production. Graduates will be equipped with skills aligned to the fourth and fifth industrial revolutions necessary to address challenges facing livestock production. Upon successful completion of this programme, students will be able to work as: -Animal Breeders, Animal Nutritionists, Rangeland Scientists, Molecular Geneticists, Beef Producers, Small Stock Producers, Poultry Producers, Animal Health Scientists, Pork Producers, Meat Inspectors, Agripreneurs, Researchers, Animal Welfare Scientists and other related fields. Students, who successfully complete the Bachelor of Agriculture in Animal Science Honours for four years, would ordinarily be able to articulate to a Master of Agriculture in Animal Science or related cognate at NQF level 9.

Admission requirements

- **2** subjects on NSSCAS level and obtained a "**d**" or higher, including Mathematics and at least any one of Biology or Agriculture.
- **3** subjects on NSSCO level with a **C** or higher, and should include Mathematics and at least any two of Biology, Agriculture or Physical Science (Physics/Chemistry).
- English must be at minimum **C** grade on NSSCO level

OR

- **3** subjects on NSSCAS level with a "**d**" or higher, including Mathematics and at least any two of Biology, Agriculture or Physical Science (Chemistry/Physics)
- 2 subjects on NSSCO level with a **D** or higher, including Mathematics and at least any one of Biology or Agriculture.
- English must be at minimum **C** grade on NSSCO level

OR

A pass in **five** different subjects as follows:

- 2 subjects on higher level (NSSCH) with a 4 or higher including Mathematics and Biology
- **3** subjects on ordinary level (NSSCO) with a **C** or higher in Mathematics and Biology, and at least a "**D**" symbol in either Physical Science, Chemistry/Physics
- English must be at minimum **C** at NSSCO level

OR

- A pass in **five** different subjects as follows:
- **3** subjects on higher level (NSSCH) with a **4** or higher including Mathematics and Biology
- 2 subjects on ordinary level (NSSCO) with a **D** or higher symbol in either Physical Science, Biology, Chemistry or Physics.
- English must be at minimum C at NSSCO level.

Exit level: NQF level 8

Duration: 4 years

Campus: Neudamm

BACHELOR OF SCIENCE IN FISHERIES AND OCEAN SCIENCES (31BFOS)

The degree provides students with the necessary skills required by the fisheries and oceanrelated sectors nationally and internationally. Graduates from this program will have the skills to drive the development of the aquaculture sector toward increasing local fish production for local consumption. The program will also produce graduates with the skills necessary for the conservation and sustainable usage of the ocean, seas, and marine resources. Students who major in Fisheries and Ocean Sciences can prepare themselves for one or more of the many careers related to the Namibia fishing industry, aquaculture, and ocean sciences which may include fisheries scientist, Fisheries technical expert, Oceanographic technical expert, Aqua-culturists, Fish feed production expert, Fish Nutritionist, Fish processing and quality controller and Marine environmental specialist. This three-year qualification articulates into a Bachelor's Hons degree (NQF level 8) at UNAM and other regional or international universities.

Admission requirements

A pass in five different subjects as follows:

- 2 subjects on NSSCAS level with an average d or higher
- 3 subjects on NSSCO level with a C or higher
- English must be at minimum C at NSSCO level
- Five subjects should include Mathematics, Biology, Physics or Chemistry.

OR

A pass in five different subjects as follows:

- 3 subjects on NSSCAS level with an average d or higher
- 2 subjects on NSSCO level with a D or higher
- English must be at minimum C at NSSCO level
- Five subjects should include Mathematics, Biology, Physics or Chemistry.

Exit level: NQF level 7

Duration: 3 years

Campus: Sam Nujoma campus

BACHELOR OF SCIENCE IN FOOD SCIENCE AND TECHNOLOGY HONOURS (31BHFT)

The degree provides students with knowledge, skills and competencies to effectively contribute to the food processing sector in Namibia and further afield. These include skills such as food product development, human nutrition, analytical laboratory, food safety, and quality management. Upon successfully completing this programme, students will be able to work as: food scientists, food technologists, food researchers, food laboratory and or sensory analysts, food processors, entrepreneurs, food microbiologists, human nutritionists, food quality practitioners, food biotechnologists, a toxicologist or food consultant. This is a four years programme, and students, who successfully complete the Bachelor of Science in Food Technology Science, would ordinarily be able to articulate to a Master of Science in Food Science or related cognate at NQF level 9.

Admission requirements

- 2 subjects on NSSCAS level and obtained a "d" or higher, including Biology and one of Mathematics, Physics/Chemistry
- 3 subjects on NSSCO level with a C or higher, and should include at least one of Mathematics, and Physics/Chemistry.
- English must be at minimum C grade on NSSCO level

OR

- 3 subjects on NSSCAS level with a "d" including Biology and one of Mathematics, Physics/Chemistry.
- 2 subjects on NSSCO level with a D or higher, and should include at least one of Mathematics, and Physics/Chemistry.
- English must be at minimum C grade on NSSCO level

Extended enrolment

- Candidates that qualify for admission to the University but lack the appropriate subjects on NSSCAS (or grades), as outlined above, for admission to the programme can opt to rather enrol for the *Extended mode* of this programme that will take one year longer.
- Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended mode of this programme:

A pass in five different subjects as follows:

- 2 subjects on higher level (NSSCH) with a 4 or higher including Mathematics and Biology
- 3 subjects on ordinary level (NSSCO) with a C or higher in Mathematics and Biology, and at least a "D" symbol in either Physical Science, Chemistry or Physics
- English must be at minimum C at NSSCO level

OR

A pass in five different subjects as follows:

- 3 subjects on higher level (NSSCH) with a 4 or higher including Mathematics and Biology
- 2 subjects on ordinary level (NSSCO) with a D or higher symbol in either Physical Science, Biology, Chemistry or Physics.
- English must be at minimum C at NSSCO level.

Exit level: NQF level 8

Duration: 4 years

Campus: First year on main campus, second to final year at Neudamm campus

BACHELOR OF SCIENCE IN CROP PRODUCTION (31BSCP)

The degree provides students with skills in crop production, practical knowledge and competencies required to respond to societal and industrial needs in Namibia and beyond.

Graduates are also enabled to identify and exploit entrepreneurial opportunities from innovative solutions to crop production system-related challenges common to developing countries. Graduates of this programme can be employed in many areas of public and private sectors such as, but not limited to, Horticulturalist, Agronomist, Seed specialists, Plant breeder specialists, Entomologists, and Crop production consultants. This is a three years qualification that articulate into a Bachelor's Hons degree (NQF level 8) at UNAM and other regional or international universities.

Admission requirements

- Two (2) subjects on NSSCAS level and obtained a "d" or higher, including Agriculture/Biology and one of Mathematics, Physics/Chemistry,
- Three (3) subjects on NSSCO level with a C or higher, and should include at least one of Mathematics, and Agriculture/Biology.
- English must be at minimum C grade on NSSCO level

OR

- Three (3) subjects on NSSCAS level with a "d" including Biology and one of Mathematics, Physics/Chemistry.
- Two (2) subjects on NSSCO level with a D or higher, and should include at least one of Mathematics, and Agriculture/Biology.
- English must be at minimum C grade on NSSCO level

Exit level: NQF level 7

Duration: 3 years

Campus: Ogongo campus

DIPLOMA IN LIVESTOCK PRODUCTION (31DPL)

The diploma provides students with knowledge, skills and competencies to effectively contribute to the development of the livestock sector in Namibia. The skills include animal husbandry practices, formulation of feeds, lick supplementation, vaccination, rangeland management, and the selection and breeding of livestock. On successful completion of this programme, graduates will be able to work as: Agripreneurs, Livestock managers, Agricultural Technical Personnel, Agricultural Extension Services, Livestock Procurement specialist, Livestock Researchers, Game Rancher, Animal Nutritionist, Animal health technical personnel, and other related fields. Graduates, who successfully complete the Diploma in Livestock Production, would ordinarily be able to articulate to a Bachelor of Agriculture in Animal Science honours, or related cognate at NQF level 7.

A pass in five different subjects as below with the combination of the following subjects: Agriculture, Biology, Mathematics, Chemistry, Physics or Physical Science

- 2 subjects on NSSCAS level and obtained a "e" or higher,
- 3 subjects on NSSCO level with a D or higher,
- English must be at minimum D grade on NSSCO level

A pass in five different subjects as follows:

• On ordinary level (NSSCO) with a minimum of 24 points on the UNAM Evaluation Scale, with English at a minimum D at NSSCO level.

OR

- With a combination of ordinary (NSSCO) and higher (NSSCH) level with a minimum of 24 points on the UNAM Evaluation Scale with English at a minimum D at NSSCO level.
- In both (i) Mathematics and (ii) English must be a minimum of a D symbol at NSSCO level and the following subject combination: Agriculture/Biology, Physics/Chemistry/Physical Science and any other subjects.

Exit level: NQF level 6

Duration: 3 years

Campus: Ogongo Campus

DIPLOMA IN SUSTAINABLE CROP PRODUCTION AND TECHNOLOGIES (31DCPT)

The diploma provides students with theoretical and practical skills that enable them to make a meaningful contribution to sustainable crop production, thereby ensuring food security in the country. The skills include effective cropping system planning, soil amendment skill for optimum cultivation of crops, application of modern technology in farming in a sustainable manner and execution of effective crop management skills under harsh agro-ecological environments. Graduates can be employed as Horticultural and Agronomic Entrepreneurs, Agro-Research specialists, Extension personnel, Farm Business Advisor, Irrigation Design Specialist, Soil laboratory specialists, and Post harvesting advisor. Students graduating from this programme may be admitted in the BSc. Crop Production degree or any other equivalent programme.

Admission requirements

A pass in five different subjects as follows:

- 2 subjects on NSSCAS level and obtained a "e" or higher, including Agriculture/Biology and one of Mathematics, Physics/Chemistry,
- 3 subjects on NSSCO level with a D or higher, and should include Mathematics, and Agriculture/Biology.
- English must be at minimum D grade on NSSCO level

OR

A pass in five different subjects as follows:

• On ordinary level (NSSCO) with a minimum of 24 points on the UNAM Evaluation Scale, with English at a minimum D at NSSCO level.

OR

- With a combination of ordinary (NSSCO) and higher (NSSCH) level with a minimum of 24 points on the UNAM Evaluation Scale with English at a minimum D at NSSCO level.
- In both (i) Mathematics and (ii) English must be a minimum of a D symbol at NSSCO level and the following subject combination: Agriculture/Biology, Physics/Chemistry/Physical Science and any other subjects.

Exit level: NQF level 6 Duration: 3 years Campus: Ogongo Campus

The following programmes in the School of Agriculture are offered on both the Mature Age entry and RPL scheme:

Bachelor of Science in Agricultural Economics (31bsae)

The following programmes in the School of Agriculture are offered only on the Mature Age entry scheme:

- Bachelor of Agriculture in Animal Science Honours (31BASS)
- Diploma in Livestock Production (31DPL)
- Bachelor of Science in Crop Production (31BSCP)
- Bachelor of Science in Food Science and Technology Honours (31BHFTt)
- Bachelor of Science in Fisheries and Ocean Sciences (31bfos)
- Diploma in Sustainable Crop Production and Technologies (31dcpt)

POSTGRADUATE PROGRAMMES

MASTERS DEGREES

Admission requirements:

Prospective candidates must be in possession of a good **Level 8** Bachelor's degree with at least a **C-grade** average (i.e., **60-69%** average), or a good Postgraduate Diploma from a recognized Institution

Candidates without a Bachelor's degree or a Postgraduate Diploma from UNAM, but who hold qualifications from an approved institution of higher learning, deemed to be equivalent to a good Level 8 Bachelor's degree or a good Level 8 Postgraduate Diploma from UNAM may also be considered for admission

Prospective candidates must also satisfy specific requirements of the Faculties where they intend to enrol (e.g. teaching experience for M.Ed. admission.)

Master of Science in Agriculture (by Thesis) with specialisations in:

- Agricultural Economics
- Animal Science
- Crop Science
- Fisheries and Aquatic Sciences
- Food Science & Technology
- Rangeland & Resources Management

DOCTORATE (PhD) Degrees

Admission requirements:

Candidates for admission to doctoral programmes of UNAM must be in possession of a Master's degree or equivalent from a recognized institution of higher learning in the chosen field of study

Candidates with only the Bachelor's degree may initially be enrolled for a Master's degree by research only. If, during the first year of research they demonstrate exceptional abilities, they may be considered for upgrading into the Doctoral Programme

DOCTORATE (PhD) in Agriculture with specialisations in:

- Agricultural Economics
- Animal Science
- Crop Science
- Fisheries & Aquatic Sciences
- Food Science & Technology
- Rangeland & Resource Management

SCHOOL OF MILITARY SCIENCES

The School of Military Science develops knowledge and expertise in the fields of military geography, military law, aeronautical science, nautical science, security and strategic studies. The knowledge equips graduates with requisite skills and offer solid preparation for professional careers in military leadership as well as in public environment such as the aviation and maritime sectors.

UNDERGRADUATE PROGRAMMES

BACHELOR OF SCIENCE IN AERONAUTICAL SCIENCE HONOURS (34BSAS)

In Aviation, the Sky is not the limit! Join the Aeronautical Science programme at UNAM and discover how to fly beyond the limits safely! Bachelor of Science in Aeronautical Science Honours is a four years programme and focuses on the world of aviation with the emphasis on the technological aspects of both military and civil aviation. The aeronautical science modules have been developed with the needs of dynamic aviation personnel in mind. The programme will equip graduands with aeronautical related problem solving, professional and technical communication skills as applied in aviation, aviation leadership skills, while overseeing aviation safety & security for all aviation stakeholders. The graduands will have opportunity to work in the field of: flight operations, air traffic control services, aeronautical information management, aviation meteorological services, airport management, aviation safety and security, aviation administration and aircraft incidents & accidents investigation services.

Admission requirements

A pass in five different subjects as follows:

- Mathematics and Physics on NSSCAS level with an average **d** or higher;
- 3 subjects on NSSCO level with a **C** or higher, one of which should be Biology or Chemistry and;
- English must be at minimum **C** at NSSCO level.

OR

A pass in five different subjects as follows:

- 3 subjects on NSSCAS level with an average **d** or higher; specifically, Mathematics & Physics, and, preferably Biology or Chemistry;
- 2 subjects on NSSCO level with a **D** or higher;
- English must be at minimum **C** at NSSCO level.
- •

A pass in five different subjects as follows:

- 2 subjects on higher level (NSSCH) with a 4 or higher;
- 3 subjects on ordinary level (NSSCO) with a C or higher;
- English, Mathematics and Physical Science must be with a minimum **C** on NSSCO.

OR

A pass in five different subjects as follows:

- 3 subjects on higher level (NSSCH) with a 4 or higher;
- 2 subjects on ordinary level (NSSCO) with a **D** or higher;
- English, Mathematics and Physical Science must be with a minimum **C** on NSSCO.

OR

 Candidates must be Namibian Defence Force (NDF) officers at the rank of 2nd Lt. – Capt. /equivalent. The candidate must be recommended by the Ministry of Defence and Veteran Affairs (MODVA).

Extended enrolment

A pass in five (5) different subjects with:

- Two (2) subjects on NSSCH with a 4 or higher;
- Three (3) subjects on NSSCO with a C or higher, and additionally,
- English, Mathematics and physical science must be with a minimum **C** on NSSCO

OR

A pass in five (5) different subjects with:

- 3 subjects on NSSCH with a 4 or higher
- 2 subjects on NSSCO with a C or higher, and additionally,
- English, Mathematics and Physical Science must be with a minimum C on NSSCO.

Exit level: NQF level 8

Duration: 4 years

Campus: Main campus

BACHELOR OF SCIENCE IN MILITARY GEOGRAPHY (34BSMG)

The purpose of the programme is to train students in the area of military geography and its applications to operations of the 4th industrial revolution. The programme has been transformed to provide students with enhanced skills and knowledge that uses data of the physical environment to make informed decisions with regards to military operations. Successful graduates will have the ability to acquire data, deduce knowledge and skills to facilitate life-long learning and capable to pursue further studies in the related fields of military geography. This programme offers quality training and innovation and thereby contributing to the achievement of national development goals. Moreover, the programme addresses four (4) Sustainable Development Goals namely: promote lifelong learning opportunities for all, promoting the combat of climate change, sustainable use of terrestrial ecosystems as well as upholding peaceful and inclusive societies. This is a three-year programme.

Graduate employability attributes

Our students are employed by the Ministry of Defence and Veteran Affairs (MODVA) in areas of,

- Military logistics
- Human resources,
- GIS and Remote sensing
- Military operations
- Military administration
- Competence in problem solving
- Creative and critical thinking
- Ethical and moral leadership

Exit Programme Outcomes

Holders of this qualification are able to:

- Identify, formulate, and solve research problems.
- Solving managerial problems in the military industry
- Apply legal knowledge in relation to military undertakings.
- Apply knowledge of Science, geography and history in the military working environment.
- Apply professional and ethical values associated with the military environment.
- Use military communication equipment effectively.
- Use the techniques, skills and modern tools necessary for military practice.
- Analyse and interpret geographical data for military operations.

Admission requirements

 Candidates must be NDF officers of the rank of 2nd Lt. – Capt./equivalent. In addition, all candidates must be recommended by the Ministry of Defence and Veteran Affairs (MoDVA).

A pass in five different subjects as follows:

- Geography and History on NSSCAS level with an average "d" or Higher.
- 3 Subjects on NSSCO level with a "C" or higher (Mathematics & Physical Science inclusive).
- English must be at minimum "C" at NSSCO level.

A pass in **five** different subjects as follows:

- 3 Subjects on NSSCAS level with an average "d" or Higher (Geography & History inclusive).
- 2 Subjects on NSSCO level with a D or higher (Mathematics & Physical Science inclusive).
- English must be at minimum C at NSSCO level.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued **prior** to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects with

- Two (2) subjects on NSSCH with 4 or higher,
- Three (3) subjects on NSSCO with **C** or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a **C** on NSSCO.
- •

OR

A pass in five (5) different subjects with

- Three (3) subjects on NSSCH with 4 or higher,
- Two (2) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a C on NSSCO

Exit level: NQF level 7

Duration: 3 years

Campus: Main campus

BACHELOR OF SCIENCE IN NAUTICAL SCIENCE (34BSNS)

The Bachelors of Science in Nautical Science, is a three (3) years programme offered by the Department of Nautical Science, University of Namibia (UNAM). This degree programme is offered on a fulltime basis at UNAM, Windhoek Main Campus. This degree programme, offers successful students various career opportunities in the maritime sectors both nationally and internationally. Nautical Science students will acquire the following skills during their three years of study: problem solving, self-discipline & self-reliance, communication (verbal and written), responsibility, accountability, professionalism, multi-tasking, logical and practical thinking, resourcefulness and decision-making. This programme covers aspects the marine vessel navigation and machinery operation. Upon graduation, graduates are able to qualify as certified seafarers and provide them with the opportunity to work through the ranks as well as providing opportunities to further their studies. Not only will the graduates be able to form part of a ship's management team, there are also opportunities to work on container ships, cruise liners, bulk carriers, ferries oil & gas tankers, deep water berths, off-shore energy, cargo ships, dredging companies, port work and specialist vessels – seismic & exploration ships, pilot vessels, tugs and mega yachts and above all, with the Namibian Navy. After the three years of study, graduates will have the opportunity to register for a honours degree in either Marine Vessel Navigation or Marine Vehicle Maintenance presented at UNAM.

Admission requirements

• Candidates must be NDF officers at the rank of Leading Seaman to Lt. Cmdr./equivalent as recommended by the Ministry of Defence and Veteran Affairs (MoDVA) or general public students.

In addition to the admission requirement (1),

EITHER

A pass in five different subjects as follows:

- Mathematics and Physics on NSSCAS level with an average "d" or Higher.
- 3 Subjects on NSSCO level with a "C" or higher (Chemistry or Geography inclusive).
- English must be at minimum "C" at NSSCO level.
- •

OR

A pass in five different subjects as follows:

- 3 Subjects on NSSCAS level with an average "d" or Higher (Mathematics and Physics inclusive).
- 2 Subjects on NSSCO level with a **D** or higher (Chemistry or Geography inclusive).
- English must be at minimum **C** at NSSCO level.

Admission based on Namibian School Leaving Certificates prior to 2021

A valid Namibian Senior Secondary Certificate (NSSC) issued **prior to 2021** (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects with

- Two (2) subjects on NSSCH with 4 or higher,
- Three (3) subjects on NSSCO with **C** or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a **C** on NSSCO.

OR

A pass in five (5) different subjects with

- Three (3) subjects on NSSCH with 4 or higher,
- Two (2) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a **C** on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main campus

The following programs in the School of Science are offered on both the Mature Age entry and & RPL schemes:

- BACHELOR OF SCIENCE IN AERONAUTICAL SCIENCE HONOURS 34BSAS
- BACHELOR OF SCIENCE IN NAUTICAL SCIENCE 34BSNS
- BACHELOR OF SCIENCE IN MILITARY GEOGRAPHY 34BSMG

POSTGRADUATE PROGRAMMES

POSTGRADUATE DIPLOMA IN SECURITY AND STRATEGIC STUDIES (34PDSS)

The one-year Postgraduate Diploma in Security and Strategic Studies programme provides graduates with the theoretical and practical context of international political economy and international security as well as practical skills in diplomacy, protocol and negotiation techniques in preparation for a wide range of career choices in international relations. The programme aligns closely with national, regional and international vision of ensuring an atmosphere of peace, security, better life and democracy. Graduates of the Programmes can articulate into the Master's in Security and Strategic Studies (MASSS) programme. This is a one-year programme.

Graduate employability attributes (generic and discipline-specific competencies)

- The graduates from the programme shall have the following key competencies:
- Problem solving skills;
- Application of security and strategic knowledge;
- Professionalism and ethical leadership;
- Individual and team work, interdisciplinary and multidisciplinary;
- Use of technologies in research and management of data;
- Articulation and protection of national interest.

Exit Programme Outcomes

- Holders of this qualification are able to:
- Formulate, analyse and solve complex defence, safety and security problems;
- Design and conduct defence, safety and security sector investigations;
- Interpret and evaluate data as well as draw conclusions on national and human security issues;
- Demonstrate problem-solving skills through development of coherent arguments and interrogation of ideas relating to defence, safety and security issues.

Admission requirements:

Prospective candidates must be in possession of a Bachelor's degree from an accredited institution. Candidates who do not comply with the above, but whose field experience and work accomplishments have been certified by the relevant Faculty/Department/Institute to be equivalent to a Bachelor's degree, may, under special circumstances, also be considered for admission.

Exit level: NQF level 8

Duration: 1 year

Campus: Main Campus

MASTER OF ARTS IN SECURITY AND STRATEGIC STUDIES (34MASS) LEVEL 9

The programme is designed to prepare graduates with appropriate knowledge and skills in defence diplomacy, military leadership, weapon systems, spheres of engagement, strategy, intelligence and translational research necessary for careers in the defence and security sector as a way of ensuring an atmosphere of peace, security, better life and democracy in Namibia and the world. The programme fulfils Sustainable Development Goals (SDGs) number 16 - to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels. This is a two-year programme.

Graduate employability attributes

- Enhanced problem-solving skills- develop coherent arguments, interrogate ideas, identify, formulate, analyse and solve complex defence, safety and security problems in a creative and innovative manner.
- Ability to apply rigorous international relations theories in understanding social-change and processes in the defence, safety and security sector.
- Ability to design and conduct defence, safety and security sector investigations in the interest of national security.

- Information/data management necessary for national interest articulation, pursuance and protection.
- Efficient time management skills
- Ability to apply ethics in academic and professional conducts

Exit Programme Outcomes

- Demonstrate knowledge and skills in solving contemporary national, regional and international security issues.
- Write coherent academic texts and security policy documents
- Apply theoretical constructs and communication skills to disseminate information and report on national, regional and international security and strategic issues,
- Demonstrate Organizational and planning skills necessary to function efficiently in the security and strategic policy environment.
- Conduct qualitative and quantitative research on security and strategic matters, nationally, regionally and internationally.
- Develop and synthesise ideas from various sources appropriately and effectively.

Admission requirements:

Prospective candidates must be in possession of a good Level 8 Bachelor's degree with at least a C-grade average (i.e., 60-69% average), or a good Postgraduate Diploma from a recognized Institution

Candidates without a Bachelor's degree or a Postgraduate Diploma from UNAM, but who hold qualifications from an approved institution of higher learning, deemed to be equivalent to a good Level 8 Bachelor's degree or a good Level 8 Postgraduate Diploma from UNAM may also be considered for admission

Prospective candidates must also satisfy specific requirements of the Faculties where they intend to enrol (e.g. teaching experience for M.Ed. admission.)

Exit level: NQF level 9

Duration: 2 years

Campus: Main campus

SCHOOL OF SCIENCE

The School of Science, the National Torchbearer, embedded in the Core University Values through quality education and knowledge dissemination, undertakes basic and advanced research to provide extensive services to stakeholders, encouraging the growth and nurturing of cultural expressions through science engagements, contributing to social and economic development through a wide spectrum of natural science offerings (Biological, Chemical, Computing, Environmental, Physical, Geographical, Geological, Wildlife-Tourism, Forestry-Rangeland Sciences), the frontiers of National development Plans and the 4th Industrial Revolution.

UNDERGRADUATE PROGRAMMES

BACHELOR OF SCIENCE IN BIOCHEMISTRY (33BSBY)

The BSc in Biochemistry qualification provides graduates with adequate depth of knowledge and skills in Biochemistry that gives opportunities towards postgraduate studies, rewarding careers and making positive contributions to society. The programme combines transdisciplinary knowledge from various sciences including molecular biology; plant science; genetics, bioorganic, and biophysical chemistry. The qualification aims to produce competent graduates that will deliver quality services and products in the biomedical research sectors, agriculture, industry, academic, and research laboratories for the benefit of the society.

Career opportunities include:

• Analytical Biochemists; Toxicologist; DNA Analysts; Biotechnologist; Science writer; Biostatistician; Bio or Nano-technologists; Assistant researchers/scientists; Laboratory technologists/assistants in fields such as higher learning institutions and research laboratories; Innovators/Entrepreneurs; Positions in various sectors i.e., Food industries, Agriculture, Environment, Municipality, NGOs etc.

A new structure (3 +1 structure) has been created, where students will exit with a 3-year BSc degree (NQF Level 7), and those who wish to further their studies can articulate into the 1-year postgraduate BSc Biochemistry honours degree (NQF Level 8) or related postgraduate degrees.

Admission requirements

A valid Namibian Senior Secondary Certificate (NSSC) with EITHER a pass in five (5) different subject combinations:

- Two (2) subjects of which Biology must be included on NSSCAS level with an average of d or higher grade/s
- Three (3) of which Mathematics and Chemistry must be included subjects on NSSCO level with an average of C or higher grade/s
- English must be at minimum C grade on NSSCO level

OR

A pass in five different subjects as follows:

- Three (3) subjects of which Biology and Chemistry must be included on NSSCAS level with an average of d or higher grade/s
- Two (2) subjects of which Mathematics must be included on NSSCO level with an average of C or higher grade/s

- English must be at minimum C grade on NSSCO level
- Candidates that lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the programme (or their chosen electives), can opt to rather enrol for an Extended Programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

 Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended mode of this programme:

EITHER a pass in five (5) different subjects with

- 2 subjects on NSSCH with 4 or higher,
- 3 subjects on NSSCO with C or higher, and additionally,
- English, Biology and Chemistry must be at minimum a **C** on NSSCO.

OR a pass in five (5) different subjects with

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with **C** or higher, and additionally,
- English, Biology and Chemistry must be at minimum a **C** on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN MICROBIOLOGY (33BSMB)

The BSc in Microbiology qualification provides graduates with theoretical and practical skills in Microbiology thereby unlocking new opportunities for the future world of work, postgraduate studies, and making useful contributions in the wider society. The qualification is relevant in Namibia and beyond where graduates work at the cutting-edge of efforts to prevent and control diseases, increase food crop and livestock production, augment soil fertility, provide clean drinking water, remedy environmental pollution, and synthesize metabolites with industrial, food, pharmaceutical and biotechnological applications and value.

The qualification is moulded in multi-, inter-, and trans-disciplinary fields including biochemistry, molecular biology; immunology; genetics, and phytopathology. The qualification aims to produce competent graduates that provide knowledge-based solutions, services and products in health, agriculture, food, soil, water, environmental, industrial, pharmaceutical, biotechnological, academic and research sectors.

Career opportunities

The programme will prepare students for local, regional and international careers such as:

• Research laboratory technician; Quality control analyst; Scientific microbiologist or immunologist; Food or dairy microbiologist; Environmental microbiologist; Recombinant DNA technologist; Fermentation technologist; Mycologist

A new structure (3 +1 structure) has been adopted where students will exit with a 3-year BSc degree (NQF Level 7), and those who wish to further their studies can articulate into the 1-year postgraduate BSc Microbiology honours degree (NQF Level 8) or related postgraduate degrees.

Admission requirements

A valid Namibian Senior Secondary Certificate (NSSC) with EITHER a pass in five (5) different subject combinations:

- Two (2) subjects of which Biology and Chemistry must be included on NSSCAS level with an average of **d** or higher grade/s
- Three (3) subjects of which Mathematics must be included subjects on NSSCO level with an average of **C** or higher grade/s
- English must be at minimum **C** grade on NSSCO level

OR

A pass in five different subjects as follows:

- Three (3) subjects of which Biology and Chemistry must be included on NSSCAS level with an average of **d** or higher grade/s
- Two (2) subjects of which Mathematics must be included on NSSCO level with an average of **C** or higher grade/s
- English must be at minimum **C** grade on NSSCO level
- Candidates that lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the programme (or their chosen electives), can opt to rather enrol for an Extended Programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

• Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended mode of this programme:

EITHER a pass in five (5) different subjects with

- 2 subjects on NSSCH with 4 or higher,
- 3 subjects on NSSCO with C or higher, and additionally,
- English, Biology and Chemistry must be at minimum a **C** on NSSCO

•

OR

A pass in five (5) different subjects with

- 3 subjects on NSSCH with 4 or higher,
- 2 subjects on NSSCO with C or higher, and additionally,
- English,
- Biology and Chemistry must be at minimum a **C** on NSSCO.

Exit level: NQF level 7 Duration: 3 years Campus: Main Campus

BACHELOR OF SCIENCE IN QUANTITATIVE FINANCE (33BSQF)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Apply all essential mathematics needed for financial modelling.
- Explain different kinds of financial and financial related risks facing organizations.
- Apply knowledge of key finance and investment practices, financial theories and applications for investment, business planning and risk management, that underpin sound decision-making.
- Able to critically analyse, interpret, solve problems, draw independent conclusions, and communicate effectively, both individually and as part of a team
- Apply probabilistic and stochastic models in risk neutral pricing
- Examine financial models and improve them appropriately with newer models
- Examine Capital Asset Pricing Models and apply appropriately in financial analysis.

Career opportunities

Graduates of this programme can be employed in many areas of public and private sectors such as, but not limited to,

- financial risk managers and analysts,
- credit risk analysts and managers
- asset managers
- investment analysts
- financial modellers
- financial product pricing analysts
- underwriters of insurance products
- actuarial mathematicians
- stress testing analysts
- Also, these graduates are able to offer consultation to financial institutions on the above-mentioned areas.
- Assistants to actuaries and Chartered Financial Analysts
- Tutors

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

• A valid Namibian Senior Secondary Certificate (NSSC) with

EITHER

A pass in total of five (5) different subjects with

- 2 subjects on NSSCAS level with a "d" average or higher, of which one should be Mathematics.
- 3 subjects on NSSCO level with "C" average or higher, and
- English must be at minimum "**C**'' at NSSCO level.

OR

A pass in total of five (5) different subjects with

• 3 subjects on NSSCAS level with a "**d**" average or higher, of which one should be Mathematics,

- 2 subjects on NSSCO level with "C" average or higher, and
- English must be at minimum "C'' at NSSCO level.
- Other subjects can either be Computer Science, Physics, Geography, Accounting, Economics, Development Studies and/or Information & Communication.
- Candidates that lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the programme (or their chosen electives), can opt to rather enrol for an Extended Programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

• A valid Namibian Senior Secondary Certificate (NSSC) issued **prior to 2021** (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended mode of this programme:

EITHER

A pass in five (5) different subjects with

- 2 subjects on NSSCH with 4 or higher,
- 3 subjects on NSSCO with **C** or higher, and additionally,
- English and Mathematics must be at minimum a C on NSSCO.
- Other subjects can either be Computer Science, Physics, Geography, Accounting, Economics, Development Studies and/or Information & Communication.

OR

A pass in five (5) different subject with

- Three (3) subjects on NSSCH with a 4 or higher,
- Two (2) subjects on NSSCO with a C o higher, and additionally,
- English & Mathematics must be at a minimum C on NSSCO.
- Other subjects can either be Computer Science, Physics, Geography, Accounting, Economics, Development Studies and/or Information & Communication.

Exit level: NQF level 7 Duration: 3 years Campus: Main Campus

BACHELOR OF SCIENCE IN DATA SCIENCE (33BSDS)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Apply computing theory and algorithms as well as mathematical and statistical models, to correctly formulate and use data analyses.
- Demonstrate how to collect, code, integrate and retrieve data from a variety of sources.
- Use appropriate analysis and transformations on a variety of data (e.g. video, audio, text) into actionable insights.
- Construct useful inferences about the nature of the data.
- Evaluate constraints on the use of data.
- Solve statistical analyses with professional data science tools and environments.
- Apply data science concepts and methods to solve real-world problems.

Career opportunities

Upon successful completion of the programme, students will be able to secure employment opportunities as

- Data Analysists
- Machine Learning Engineers
- M&E Experts
- Product Specialists
- Data Architects
- Statisticians
- System Analysts
- Data Clerk
- Data Manager
- Consultants
- Application Developers
- Data Mining Experts
- Data Engineer
- Database Engineers and other related career opportunities.

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

• Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with

EITHER

A pass in total of five (5) different subjects with

- 2 subjects on NSSCAS level with a "d" average or higher, of which one should be Mathematics.
- 3 subjects on NSSCO level with "C" average or higher, and
- English must be at minimum "C'' at NSSCO level.

OR

A pass in total of five (5) different subjects with

- 3 subjects on NSSCAS level with a "d" average or higher, of which one should be Mathematics,
- 2 subjects on NSSCO level with "C" average or higher, and
- English must be at minimum "C'' at NSSCO level.
- Candidates that lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the programme (or their chosen electives), can opt to rather enrol for an Extended Programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

• Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended mode of this programme:

EITHER

A pass in five (5) different subjects with

- 2 subjects on NSSCH with 4 or higher,
- 3 subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a C on NSSCO.

OR

A pass in five (5) different subjects with

- 3 subjects on NSSCH with 4 or higher,
- 2 subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a C on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN STATISTICS (33BSST)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- apply the basic theoretical and applied principles of Statistics
- identify trends and relationships in data
- take optimal Statistical decisions to solve data analysis problems
- demonstrate how to apply Statistics as a science of data interpretation and analysis
- communicate key statistical concepts
- proficiently use statistical the following software for data analysis: R, SPPS, Excel, VBA
- undertake Statistical research under supervision and compile Statistical reports
- design, implement and analyse clinical studies
- predict demand for products and services
- provide projections in market research undertakings

Career opportunities

Most graduates of the Bachelor of Science in Statistics will be employed as office administrators in Governmental Ministries & Departments; Research Institutions; Banking industry; Medical research institutions; National Planning Commission; Namibia Statistics Agency; Banking Sector; Insurance & Pension Companies just to mention a few. Some of the possible job titles may be:

- Statistical Data Analyst
- Database Manager/Developer
- Demographer
- Big Data Miner
- Artificial Intelligence Programmer

- Monitoring & Evaluation Officer
- National Development Policies Officer
- Financial, Investment and Risk Manager
- Financial, Investment and Risk Analyst
- Pricing & Tariffs Analyst
- Mathematics & Statistics Tutor

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards:

• Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with either:

A pass in 5 different subjects as follows:

- 2 subjects, one of which should be Mathematics, on NSSCAS level with a "d" average or higher grade;
- 3 subjects, one of which should be Mathematics, on NSSCO level with "C" average or higher grade;
- English must be at minimum "C'' grade on NSSCO level.

OR

A pass in 5 different subjects as follows:

- 3 subjects, one of which should be Mathematics, on NSSCAS level with a "d" average or higher grade;
- 2 subjects, one of which should be Mathematics, on NSSCO level with "D" average or higher;
- English must be at minimum "**C**'' at NSSCO level.
- In Candidates that qualify for admission to the University but lack the appropriate subjects on NSSCAS (or grades), as outlined above, for admission to the programme (or their chosen electives), can opt to rather enrol for the *Extended mode* of this programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021:

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued **prior to 2021** (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a **C** on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a **C** on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN POPULATION STUDIES (33BSPO)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Infer the demographic factors that affect the population growth
- Interpret and infer demographic modelling
- Conceptualize challenges of the demographic dividend.
- Apply essential practical skills in the area of Population Statistics and its interpretation, using a range of statistical software packages.
- Plan, conduct and manage population surveys and population censuses.
- Contrast the interaction between population, development and the environment
- Devise and disseminate demographic data for policy development and planning;
- Synthesize population information from a variety of sources for policy development and planning.
- Analyse the essential theoretical and practical skills in demographic analysis;

Career opportunities

Graduate of this programme can be employed as:

- Junior Demographers
- Assistant Health sector analyst,
- Assistant Policy analyst
- Assistant Development Planners,
- Assistant Epidemiologist,
- Assistant Bio-statistician,
- Data analysts and data scientist
- Tutors

Admission requirements

Admission based on Namibian School Leaving Certificate 2021 onwards

To be admitted into the BSc Population Studies degree programme, a candidate must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with a pass in five (5) different subjects as follows:

- two (2) subjects on NSSCAS level with a d average or higher in Mathematics,
- three (3) subjects on NSSCO at level C or higher, one of which should be Mathematics, and
- English that must be at minimum **C** at NSSCO level.

OR

A pass in five (5) different subjects with

- three (3) subjects on NSSCAS level with a d average or higher in Mathematics,
- two (2) subjects on NSSCO at level D or higher, one of which should be Mathematics, and

• English that must be at minimum **C** at NSSCO level.

Admission based on Namibia School Leaving Certificate prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued **prior to 2021** (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects with

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a **C** on NSSCO.

OR

A pass in five (5) different subjects with

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with **C** or higher, and additionally,
- English and Mathematics must be at minimum a **C** on NSSCO.
- Candidates that qualify for admission to the University but lack the appropriate subjects on NSSCAS (or grades), as outlined above, for admission to the programme can opt to rather enrol for the *Extended mode*, which will take one year longer than this programme.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN COMPUTING (33BCMP)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Analyse problems and use appropriate technological skills to develop solutions
- Apply scientific process in the analysis, design and development of computer systems
- Broadly apply recurring themes and principles of computing to various domains
- Analyse complex problems and formulate appropriate computing solutions
- Manipulate tools and environments for the development and deployment of software applications
- Apply information and system protection technologies and methods in an organisation
- Communicate solutions and justify design choices

Career opportunities

Upon successful completion of the programme, students will be able to secure employment opportunities as

- Software Engineers
- Computing Researchers
- Database Managers
- Data Scientist
- System Analyst
- Tutors
- Programmers
- Network Administrators
- Cyber Security Engineers
- User Experience Designers
- Web Developers

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCAS level with a d <u>average</u> or higher, specifically Mathematics & English,
- three (3) subjects on NSSCO at level C or higher, one of which should be Mathematics, and
- English that must be at minimum **C** at NSSCO level.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCAS level with a d <u>average</u> or higher, specifically Mathematics & English,
- two (2) subjects on NSSCO at level **D** or higher, one of which should be Mathematics if it wasn't taken on AS, and
- English that must be at minimum C' at NSSCO level.
- Computing Entry test

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued **prior to 2021** (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a **C** on NSSCO.

OR

A pass in five (5) different subjects with

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a C on NSSCO.
- Computing Entry test with a minimum of 50% pass

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN ENVIRONMENTAL AND GEOGRAPHYICAL SCIENCE (33BEGS)

Skills & Knowledge that shall be taught & developed in this programme:

The Bachelor of Environmental and Geographical Science programme was developed to train well-rounded environmental stewards, well-equipped to efficiently address the fastevolving environmental challenges at national, regional and global scale. The programme will also impart the necessary computational and geospatial skills to enable timeous tracking of environmental conditions at all scales as well as pre-emptive interventions deploying 4th and 5th Industrial Revolution technological advances. The Bachelor of Environmental and Geographical Science is aligns to a number of the United Nation Sustainable Development Goals (SDGs), which entail inter alia sustainable management and efficient use of natural resources, reducing waste generation through prevention, reduction, recycling and reuse; lowering adverse environmental impact of cities per capita; improving water quality; increasing contribution of renewable energy to power grids; reinforcing resilience and adaptive capacity to climate related hazards and natural disasters; addressing desertification, restoring degraded land and soil and strive for a land degradation neutrality. This programme will train graduates with increased zeal, competencies and skills for addressing environmental challenges, including:

- Analysis of Environmental policies;
- Environmental impact assessment and monitoring;
- Spatial analysis;
- Digital image processing and analysis;
- Mapping and cartography;
- Fieldwork planning, etiquette and data collection
- Statistical analysis;
- Data management;
- Programming and scripting skills
- Project planning and management
- Report writing skills

In addition, practical, everyday skills required in the world of work shall be imparted including:

- Innovative and Entrepreneurship mind
- Problem solving
- Creative and critical thinking
- Global citizenry with an international perspective
- Adaptability and flexibility;
- Technological and digital literacy
- Team work and conflict management
- Effective communication
- Time management
- Networking, and Negotiation skills

Some of these attributes are not necessarily taught but will be developed in the context of the curriculum and the total university experience through reflective learning, facilitated by specific targeted interventions and experiences.

Career Opportunities on completion of this programme:

Environmental Management, Environmental Compliance, Waste Management, Environmental Impact Assessment (EIA), Occupational Health and Safety, Environmental Consultancy, Environmental Planning, Environmental/ecological rehabilitation, Environmental restoration, Land Use Planning, Environmental awareness and advocacy, Entrepreneurs in waste streams (recycling and refurbishment)

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

- Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with EITHER a pass in five (5) different subjects with:
 - two (2) subjects on NSSCAS level with a d <u>average</u> or higher, specifically Biology or Geography,
 - three (3) subjects on NSSCO at level C or higher, two of which should be Mathematics and Chemistry, and
 - English that must be at minimum C at NSSCO level.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCAS level with a d <u>average</u> or higher, specifically Biology & Geography, preferably, also Mathematics,
- two (2) subjects on NSSCO at level D or higher, one of which should be Mathematics if it wasn't taken on AS, and
- English that must be at minimum C' at NSSCO level.

Candidates that qualify for admission to the University but lack the appropriate subjects or grades on NSSCAS as outlined above for admission to the programme, can opt to rather enrol for the Extended Enrolment of this programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

• Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended Enrolment of this programme:

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English, Biology and Geography must be at minimum a C on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English, Biology and Geography must be at minimum a C on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN FORESTRY AND RANGELAND MANAGEMENT (33BSFR)

Skills & Knowledge that shall be taught & developed in this programme:

This programme was developed in response to UNAM curriculum transformation. As expounded in the senate approved UNAM Curriculum Transformation Framework, the UNAM curriculum transformation was triggered by a number of aspects including the national basic education reform, the changing landscape at institutions of higher learning in response to the 4rth and 5th industrial revolution as well as the inadequacies of the UNAM curricular in terms student workload, teaching and assessment methods and inflexible exit pathways. The new curriculum has a build in programme to respond to the new ranges of knowledge, skills and attitudes required by the labour market demands thereby can contribute to increasing employability of the graduates in order to achieve the Namibia vision 2030 for transforming Namibia to become an industrialized nation. Upon completion of this programme students will possess the following generic and discipline-specific competencies and attributes including:

- Forest and range assessment skills
- Field work and lab safety skills
- Environmental awareness and social responsibility
- Data analytical skills
- Problem solving skills
- Creative and critical thinking skills
- Ethical and moral leadership and conduct
- Team work
- Innovative and entrepreneurial mind
- Effective communication skills
- Technological and digital literacy
- Global citizenry with an international perspective
- Conflict management skills
- Project management skills
- Networking, and Negotiation skills

Some of these attributes cannot be taught but will be developed in the context of the curriculum and the total university experience through reflective learning, facilitated by specific targeted interventions and experiences. The integration of generic attributes in the curriculum ensures students develop skills that will better equip them not only for the world of work, but also for self-employment.

Career opportunities on completion of this programme:

Graduates from this programme can go into the following career opportunities:

- Range management
- Forest management
- Range and forest resources Monitoring
- Rangeland assessment
- Game farming
- Community based natural resource management

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

The candidate must be in the possession of a valid Namibian Senior Secondary Certificate (NSSC) with:

Five different subjects as follows:

- 2 subjects on NSSCAS level with an average "**d**" or higher one of which must either be Biology or Mathematics
- 3 subjects on NSSCO level with a "C" or higher, one of which must either be Mathematics or Biology or Geography or Chemistry.
- English must be at minimum "C" at NSSCO level

OR

A total of at least 27 points on the UNAM Scale obtained in five different subjects as follows:

- subjects on NSSCAS level with an average "d" or higher, two of which must be Biology and Mathematics, or Biology and Geography
- 2 subjects on NSSCO level with an average "D" or higher including any of these subjects Biology, Chemistry, Geography, Mathematics, Development Studies, Agricultural Science
- English must be at minimum C at NSSCO level

Preference will be given to candidates that met the above criteria and who have subject combination constituting Biology, Mathematics, Agricultural Sciences, Chemistry, Development Studies, and Geography.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates that lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the Programme (or their chosen electives), can opt to rather enrol for an Extended Programme that will take one year longer. This is particularly the case for candidates who are in possession of a valid Namibian Senior Secondary Certificates (NSSC) issued **prior to 2021** and have a pass in 5 different subjects as outlined below:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a **C** on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with **C** or higher, and additionally,
- English, Mathematics and Biology Science must be at minimum a **C** on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Ogongo Campus

BACHELOR OF SCIENCE IN GEOLOGY (33BSGY)

The degree is transformed to be epistemically diverse and cover base for a wide spectrum of geoscience employability attributes, mainly responding but not limited to:

• The expected critical mineral raw material exploration boom stimulated by the clean energy and digital revolution,

- Discoveries of hydrocarbon deposits in Namibia
- alternative energy resources and on the blue economy.
- ground water resource and environment sustainability,

A programming component is added to the bachelor's degree with respect to machine and technology assisted learning toward the future of jobs. For the third year (which serve as the exit point in our 3+1 system) employability attributes have been enhanced in terms of the competencies, for students to exit with functional skill attributes in the digital and data driven era, with ethical and sustainable earth resource exploration and exploitation. A component of work integrated learning is added to enhance student employability attributes not attainable in class. Field work has been emphasized to enhance the field skills for geologists. Upon graduation, students can opt to articulate in the following one-year honours programs

- Exploration & Economic Geology:
- Hydrogeology & Environmental Geology
- Petroleum Geology & Geophysics

Career Opportunities

- Exploration geologists (Mining, Mineral Exploration, Water exploration, Hydrocarbon exploration)
- GeoTechnicians (Mining, Construction, public sector)
- Environmental Consultants
- Geoscience entrepreneurs.
- Geoscientists (private sector)
- Geotour guides

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with:

A pass in five (5) different subjects with:

- 3 subjects on NSSCAS level with a "d" average or higher, specifically Mathematics, Physics and Chemistry
- 2 Subjects on NSSCO level C or higher of which one should be English

Candidates that lack the appropriate subjects (or grades) on NSSCAS as outlined above for admission to the program (or their chosen electives) can opt to rather enrol for an Extended Programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects can enrol in the Extended mode of this programme:

A pass in five (5) different subjects with:

• English, Mathematics and Physical Science must be at minimum C or high on NSSCO and minimum 4 or higher on NSSCH.

Exit level: NQF level 7

Duration: 3 years

Campus: Southern Campus

BACHELOR OF SCIENCE IN CHEMISTRY (33BCHM)

Skills and Knowledge to acquire from the programme:

The newly transformed programme has been designed to maintain a strong foundation of traditional chemistry while stressing on the chemistry of the 21st century. This was done by introducing modules in the areas of Nano-chemistry and material chemistry. Following the 4th and 5th Industrial Revolutions, the field of nanotechnology and advanced materials define the future, to contribute to solving global problems as envisaged by the UN's SDGs. The qualification also emphasizes on improving the lab capabilities of our graduates by introducing the module "Lab Techniques & Skill", which sorely focuses on assessing the student's abilities in designing and conducting laboratory experiments effectively and safely. The contents of the specific modules have been also revised to enhance key competencies in our graduates such as being self-driven, curious, innovative and inquisitive chemists.

The programme aims to produce graduates with:

- thorough understanding of the basic chemistry concepts and principles,
- sound chemical reactions' designing and results' interpretation skills,
- critical thinking and chemistry-related problem-solving skills, and
- advanced communication skills and professionalism

Career opportunities

- Academia (chemistry),
- Mining (analytical chemistry),
- Forensic services (chemistry),
- Food and pharmaceuticals,
- Scientific consultancy (chemistry),
- Technical management,
- Research assistantship (chemistry)
- Laboratory technologist/technician (chemistry)
- Water reclamation industries

Admission requirements

Normal enrolment

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC). Additionally, the following requirements must be satisfied:

A pass in 5 different subjects as follows:

- Two (2) subjects on NSSCAS level with a "D" average or higher. Specifically, these subjects must be Chemistry and Mathematics
- Three (3) subjects on NSSCO level with "C" average or higher. Which must include either Physics or biology, or both, and
- English must be at minimum "C" at NSSCO level

OR

A pass in 5 different subjects as follows:

- Three (3) subjects on NSSCAS level with a "D" average or higher. Two of the subjects must be Chemistry and Mathematics
- Two (2) subjects on NSSCO level with "C" average or higher. Which must include either Physics or biology, or both, and
- English must be at minimum "C" at NSSCO level

Candidates that have Physics, Biology or Computer Science on AS with a "d" average, will be able to directly take advantage of the corresponding electives in the 1st year.

Extended enrolment

Candidates that qualify for admission to the University but lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the programme (or their chosen electives), can opt to enrol for an Extended Programme that will take one year longer.

Additionally, candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) **issued prior to 2021 (only)** and have a pass in 5 different subjects as outlined below, can also join the Extended mode of this programme.

A pass in five (5) different subjects with:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a **C** on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a C on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE MATHEMATICS (33BSMM)

Skills and Knowledge to acquire from the programme:

Holders of this qualification are able to:

- Evaluate and solve problems using a range of mathematical tools.
- Follow and conduct abstract thought processes.
- Predict market developments using mathematical models.
- Solve differential equations.
- Present research findings and write scientific reports.
- Design and document algorithms.
- Organise complex work processes and coordinate workforces.
- Apply Linear algebra techniques relevant in engineering, physics, natural sciences, computer science, computer animation, and the social sciences.
- Self-acquire knowledge and work independently.

Career opportunities:

Graduates of this programme can be employed as

- Research assistants in the educational, public, or private sector.
- Assistants to data analysts and data scientists.
- Developers of specialised software.
- Market researchers.
- Assistants to data analysts and data scientists
- Assistants to financial analysts.
- Assistant business consultants.
- Copy editors in the science and education sectors.
- Tutors

Admission requirement

Admission based on Namibian School Leaving Certificates 2021 onwards

• Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with

EITHER

A pass in total of five (5) different subjects with:

- 2 subjects on NSSCAS level with a "d" average or higher, of which one should be Mathematics.
- subjects on NSSCO level with "C" average or higher, and
- English must be at minimum "C" at NSSCO level.

OR

A pass in total of five (5) different subjects with:

- subjects on NSSCAS level with a "d" average or higher, of which one should be Mathematics,
- 2 subjects on NSSCO level with "C" average or higher, and
- English must be at minimum "C'' at NSSCO level.

Candidates that lack the appropriate subjects (or grades) on NSSCAS, as outlined above, for admission to the programme (or their chosen electives), can opt to rather enrol for an Extended Programme that will take one year longer.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the Extended mode of this programme:

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a C on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a C on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main campus

BACHELOR OF SCIENCE IN ECOLOGY AND BIODIVERSITY CONSERVATION (33BSEB)

Skills & Knowledge that shall be taught & developed in this programme:

The development of the Bachelor of Science in Ecology and Biodiversity Conservation was motivated by the following compelling factors; namely the National Basic Education reform, the need for continuous improvement of the UNAM curricula and the changing Higher Education landscape in response to the fourth and fifth Industrial Revolutions (4IR/5IR), feedback from stakeholders and alumni inputs, response to international, regional and national declarations, protocols and conventions, plan of actions, goals, policies, laws, regulations and imperatives, the impact of climate change on biodiversity, as well as responses to the new ranges of knowledge, skills and attitudes required by the labour market demands. Therefore, this new Bachelor of Science in Ecology and Biodiversity Conservation was transformed to impart fundamental knowledge and skills in the fields of Ecology and Biodiversity Science including:

- Taxonomic (Description, Identification, Naming and Classification) skills,
- GIS and mapping skills,
- Biodiversity assessment skills,

- Data collection skills
- Data analysis including R statistical software and interpretation skills,
- Field techniques and etiquette
- Observational skills
- Project management
- Community Engagement
- Scientific communication and research skills
- Ecological modelling in conservation

Practical, everyday skills required in the world of work shall be imparted including:

- Problem solving skills
- Creative and critical thinking skills
- Ethical and moral leadership and conduct
- Environmental awareness and social responsibility
- Team work
- Innovative and entrepreneurial mind
- Effective communication skills
- Technological and digital literacy
- Global citizenry with an international perspective
- Conflict management
- Time management
- Networking, and Negotiation skills

These attributes cannot be taught but will be developed in the context of the curriculum and the total university experience through reflective learning, facilitated by specific targeted interventions and experiences. The integration of generic attributes in the curriculum ensures students develop skills that will better equip them not only for the world of work, but also for self-employment.

Career Opportunities on completion of this programme:

- Nature Conservation
- Academia
- Forestry, wildlife and Ecotourism
- Environmental Education
- Environmental Consultancy
- Environmental Management

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

The University of Namibia General Regulations governing admission of students to first year undergraduate degree programmes shall apply. The general admission and entry requirements to undergraduate BSc in Ecology and Biodiversity Conservation programme shall be:

Candidates must be in possession of a valid Namibian Senior Certificate (NSSC) with EITHER a pass in five different subjects as follows:

 Two (2) subjects on NSSCAS level with an average (d) or higher grade/s; one of which must be Biology

- Three (3) subjects on NSSCO level with a **C** or higher; one of which must be Mathematics and Physical Science (or equivalent).
- English must be at minimum **C** grade on NSSCO level

OR

A pass in five different subjects as follows:

- Three (3) subjects on NSSCAS level with an average of (**d**) or higher one of which must be Biology
- Two (2) subjects on NSSCO level with a **C** or higher; one of which must be Mathematics and Physical Science (or equivalent).
- English must be at minimum **C** grade on NSSCO level

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued **prior to 2021** (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects as follows:

- two (2) subjects on NSSCH with 4 or higher,
- three (3) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a C on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 4 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English, Mathematics and Physical Science must be at minimum a **C** on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCE IN PHYSICS (33BPHY)

Skills & Knowledge that shall be taught & developed in this programme:

In an interview in December 2020, the entrepreneur behind 4th Industrial Revolution based industries like SpaceX, Tesla, and other mega companies, as well as the world's richest person, Elon Musk, was asked by Axel Springer "How do you manage to dive so deeply into so many different engineering challenges?" Elon Musk replied, "Well I studied physics and I certainly strongly recommend physics as a good grounding in understanding the nature of reality." He continued to say that "...the analytical principles [and] the analytical constructs used in physics applies to basically anything.", and he further said that "...it is incredibly helpful in all arenas."

Therefore, this new Bachelor of Science in Physics was transformed to develop the knowledge and skills that are needed for a graduate to participate in the 4th and the emergent 5th Industrial Revolutions. These are

- Fundamental knowledge in physics, mathematics and the peerless understanding and analytical skills it provides like
- The ability to apply scientific knowledge,
- Analytical and critical thinking,
- Planning and design of experiments,
- A working knowledge of practical electronics,
- Numeracy and quantification skills,
- Analysis, representation, and interpretation of data,
- Problem solving,
- Scientific computing & ICT skills including programming, computer simulations, machine learning and data mining of scientific data.

Practical, everyday skills shall be imparted that will enhance chances of success as an entrepreneur or a valued and skilled employee like:

- The ability to retrieve information from a range of sources,
- Report writing and written communication skills,
- The ability to self-acquire knowledge, enabling independent learning ability required for continuing professional development,
- Team working,
- Time management and organisational skills, and
- Basic leadership skills.

In addition, appreciation of business, commerce, and industry as well as an appreciation of ethical behaviour shall be fostered.

Career Opportunities on completion of this programme

- Various types of entrepreneurs
- Coders of specialised software
- Science communicators in various forms of media
- Operators in the growing renewable energy industry
- Research assistants and laboratory workers in industry, private, pub
- Process controllers in industry
- Assistants to data analysts and data scientists
- Assistants to analysts in the scientific and financial sectors
- Tutoring service

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with:

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCAS level with a d <u>average</u> or higher, specifically Mathematics & Physics,
- three (3) subjects on NSSCO at level ${\bf C}$ or higher, one of which should be Chemistry, and
- English that must be at minimum **C** at NSSCO level.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCAS level with a d <u>average</u> or higher, specifically Mathematics & Physics, and, preferably, also Chemistry,
- two (2) subjects on NSSCO at level C or higher, one of which should be Chemistry if it wasn't taken on AS, and
- English that must be at minimum **C**' at NSSCO level.

Candidates that have Chemistry on AS with a **d** average, will be able to directly take advantage of the Chemistry electives in the 1st year.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued **prior** to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the *Extended mode* of this programme:

EITHER

A pass in five (5) different subjects with:

- two (2) subjects on NSSCH with **4** or higher, specifically Mathematics & Physical Science,
- three (3) subjects on NSSCO with **C** or higher, and
- English must be at minimum a C on NSSCO.
 OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with **4** or higher, specifically Mathematics & Physical Science,
- two (2) subjects on NSSCO with **C** or higher, and
- English at minimum a **C** on NSSCO.

Exit level: NQF level 7

Duration: 3 years

Campus: Main Campus

BACHELOR OF SCIENCES IN WILDLIFE AND TOURISM MANAGEMENT (33BSWM)

Skills & Knowledge that shall be taught & developed in this programme:

About 43% of the land in Namibia is designated as protected area and this demonstrates the importance the government of Namibia places on wildlife management, conservation and sustainable use of its natural resources. Both the wildlife and tourism sectors are important to the economy of Namibia and that there is still demand for wildlife management and tourism graduates into the job market. However, to be effective and efficient, the newly transformed Bachelor of Sciences in Wildlife and Tourism Management (Level 7) is geared to develop knowledge and skills that are required for a graduate to contribute towards sustainable utilisation of fauna and flora using the latest technology, embracing the 4th and the emergent 5th Industrial Revolutions.

The ultimate knowledge that can be acquired from the newly developed programme are as follows:

- Creative critical thinking and problem solving.
- Application of science-based and local knowledge in the stewardship of wild animal populations.
- Content knowledge in structure and function in/of the ecosystem.
- Innovative entrepreneurial thinking.
- Digital, technological, and marketing capabilities.
- Innovative planning.
- Professionalism and ethical leadership readiness.
- Professional presentation, communication, compassion, adaptability, and flexibility

The programme is geared to transforms mind sets and enhance chances of its graduates to become entrepreneurs through a series of accustomed skills such as:

- Analytical skills in laboratory analysis and safety protocols
- Ethical skills towards wildlife management/ resources and tourism
- Ethical grounded towards wildlife resources and tourism management Love, respect, and honour for wildlife resources
- Statistical and geostatistical skills
- Entrepreneurship skills
- Legal competence
- Nature-based survival and safety skills

Career Opportunities on completion of this programme:

- Wildlife ranger/ wildlife farmer
- Nature conservationist or
- Manager of communal and private conservancy's areas,
- Research officer/ extension officers,
- Technologist,
- Tutors at universities,
- Chief Wardens at national parks and game reserves,
- Environmental officers,
- Eco-tourist guide, journalist, wildlife photographer, etc.

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with Either a pass in five (5) different subjects with:

- Two (2) subjects on NSSCAS level with a d average or higher grade/s.
- These two subjects on NSSCAS level can either be Biology, Geography, Physical Science, or History.
- Three (3) subjects on NSSCO level with a c average or higher grade/s.
- Two of the three subjects (3) must be English and Mathematics with a minimum c grade on NSSCO level.
- The other two subjects can either be Biology, Geography, Physical Science, History, Development Studies, or Agriculture.

A specific subject cannot be used to contribute to total points at both the NSSCAS and NSSCO level, despite the learner having written both NSSCAS and NSSCO examinations for that specific subject.

OR

Candidates must be in possession of a valid Namibian Senior Secondary Certificate (NSSC) with Either a pass in five (5) different subjects with:

- Three (3) subjects on NSSCAS level with a d average or higher grade/s.
- These three (3) subjects on NSSCAS level can either be Biology, Geography, Physical Science, or History.
- Two (2) subjects on NSSCO level with a C average or higher grade/s.
- Two (2) of the subjects on NSSCO level must be Mathematics and English.
- Other subjects can either be Biology, Geography, Physical Science, History, Development Studies, and Agriculture.
- A specific subject cannot be used to contribute to total points at both the NSSCAS and NSSCO level, despite the learner having written both NSSCAS and NSSCO examinations for that specific subject.
- English must be at minimum c grade on NSSCO level.

Exit level: NQF Level 7

Duration: 3 years

Campus: Katima Mulilo Campus

DIPLOMA IN APPLIED STATISTICS (33DSST)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Formulate any basic research problem in statistical terms.
- Calculate routine statistical summaries and economic indicators.
- Outline the role, governance and legislation related to statistics in the broader economic and social context.
- Summarise data using commonly used statistical software.
- Apply statistical procedures in areas such as demography, economics, labour and employment, marketing and business, bioinformatics, as well as ICT for evidence-based decision making.
- Collect meaningful data through appropriate survey/census design and sample sampling procedures.
- Apply statistical procedures with confidence

Career opportunities

Upon successful completion of the programme, students will be able to secure employment opportunities in educational as well as in public and private sectors as:

- Junior / Assistant Statisticians
- Research Assistants / Junior Researchers

- Data Entry Clerks
- Tutors
- Junior Quantitative Analysts
- Junior / Assistant Applied Statistics Consultants

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

To qualify for admission to the Diploma in Applied Statistics based on Namibian School Leaving Certificate, an applicant shall satisfy any one of the following minimum requirements:

A pass in five (5) different subjects with a C average or higher:

- two (2) subjects on NSSCO level with a D average or higher, specifically Mathematics & English obtained on a Second language.
- two (2) subjects on a combination of NSSCO and NSSCAS level with a D average or higher, specifically Mathematics & English obtained on a First or Second language at NSSCO level.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the normal mode of this programme:

EITHER

A pass in five (5) different subjects with

- two (2) subjects on NSSCH with 5 or higher,
- three (3) subjects on NSSCO with D or higher, and additionally,
- English and Mathematics must be at minimum a D on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 5 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a D on NSSCO.

Exit level: NQF level 6

Duration: 3 years

Campus: Main Campus

DIPLOMA IN COMPUTING (33DCMP) LEVEL 6

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Apply the relevant computational concepts, principles and theories in appropriate situations.
- Apply legal and ethical considerations in any information systems environment.
- Carry out routine and non-routine system administration tasks.
- Configure and maintain networking equipment.
- Design, implement and administer database systems.
- Design, implement and maintain software programs.

Career opportunities

Upon successful completion of the programme, students will be able to secure employment opportunities in

- ICT Systems Maintenance
- Network Administration
- System Administration
- Database Administration
- Programming
- System Analysis
- ICT Help Desk Administration
- Software Development
- Business ownership

Admission requirements

Admission based on Namibian School Leaving Certificates 2021 onwards

To qualify for admission to the Diploma in Applied Statistics based on Namibian School Leaving Certificate, an applicant shall satisfy any one of the following minimum requirements:

A pass in five (5) different subjects with a C average or higher:

- two (2) subjects on NSSCO level with a D average or higher, specifically Mathematics & English obtained on a Second language.
- two (2) subjects on a combination of NSSCO and NSSCAS level with a D average or higher, specifically Mathematics & English obtained on a First or Second language at NSSCO level.

Admission based on Namibian School Leaving Certificates prior to 2021

Candidates in possession of a valid Namibian Senior Secondary Certificate (NSSC) issued prior to 2021 (only) and has a pass in 5 different subjects, as outlined below, can enrol in the normal mode of this programme:

EITHER

A pass in five (5) different subjects with

- two (2) subjects on NSSCH with 5 or higher,
- three (3) subjects on NSSCO with D or higher, and additionally,
- English and Mathematics must be at minimum a D on NSSCO.

OR

A pass in five (5) different subjects with:

- three (3) subjects on NSSCH with 5 or higher,
- two (2) subjects on NSSCO with C or higher, and additionally,
- English and Mathematics must be at minimum a D on NSSCO.

Exit level: NQF level 6

Duration: 3 years

Campus: Oshakati Campus

The following programs in the School of Science are offered on both the Mature Age entry and & RPL schemes:

- Diploma in computing (33DCMP)
- Diploma in applied statistics (33DSST)
- Bachelor of sciences in wildlife and tourism management (33BSWM)
- Bachelor of science in physics (33BPHY)
- Bachelor of science in ecology and biodiversity conservation (33BSEB)
- Bachelor in science mathematics (33BSMM)
- Bachelor of science in chemistry (33BCHM)
- Bachelor of science in geology (33BSGY)
- Bachelor of science in forestry and rangeland management (33BSFR)
- Bachelor of science in environmental and geographical science (33BEGS)
- Bachelor of science in computing (33BCMP)
- Bachelor of science in population studies (33BSPO)
- Bachelor of science in statistics (33BSST)
- Bachelor of science in data science (33BSDS)
- Bachelor of science in quantitative finance (33BSQF)
- Bachelor of science in microbiology (33BSMB)
- Bachelor of science in biochemistry (33BSBY)

POSTGRADUATE PROGRAMMES

POSTGRADUATE DIPLOMA IN APPLIED RESEARCH METHODS (33PARM)

Skills and Knowledge to acquire from the programme

Holders of this qualification are able to:

- Demonstrate deepened comprehension, systematic knowledge and expertise in statistics, including research design, data analysis, data modelling and its interpretation using a range of popular statistical software packages, as well as develop oral and presentation skills in scientific reasoning and analyses.
- Plan and conduct supervised research of an applied nature using a coherent and critical principles, theories and methodologies of statistical sciences.
- Demonstrate professional competencies in independent process evaluation, responsibility, accountability and general ethics.
- Evaluate and apply statistical theories, techniques and models to solve complex statistical related problems.
- Pursue (further) a career involving qualitative and quantitative research skills within a diverse range of fields and organisations.
- Demonstrate the ability to work individually and as members of multidisciplinary teams.

Career opportunities

Graduates from the Postgraduate Diploma in Applied Research Methods programme will be well-equipped to be employed in Government departments; Universities and Research institutions; Banking industry and Medical research. The National Planning Commission; Namibia Statistics Agency; Ministry of Agriculture, Water and Forestry; Ministry of Labour; Standard Bank; Alexander Forbes just to mention a few. These students are either employed as

- Statisticians,
- Demographers,
- Development Planners,
- Data Analysts,
- Researchers or Risk Analysts as well as Monitoring and Evaluation Officers.

Admission requirements

To register for this programme a candidate must hold at least an NQF level 7 diploma or undergraduate degree or any equivalent qualification from a recognized institution. In addition, candidate must have already done research methods module & research project/mini-thesis or their equivalents in their NQF level 7 qualification.

Minimum requirements for re-admission into the School / Programme

Normal enrolment

To be re-admitted to this programme, a student must have successfully completed the following minimum number of credits as indicated below:

• 45 credits (of which 29 must be non-core) by the end of the first year of registration The programme must be completed after a maximum of 2 year of registration

Extended enrolment

To be re-admitted to this programme, a student must have successfully completed the following minimum number of credits as indicated below:

- 45 credits (of which 29 must be non-core) by the end of the first year of registration
- 90 credits (of which 57 must be non-core) by the end of the second year of registration. The programme must be completed after a maximum of 3 years of registration.

Exit level: NQF level 8

Duration: 1 year Campus: Main Campus

POSTGRADUATE DIPLOMA IN HERITAGE CONSERVATION & GEOGRAPHICAL SCIENCE (13PHCM)

Skills and Knowledge to acquire from the programme:

*PLEASE INSERT CORRECT INFORMATION Career opportunities:

*PLEASE INSERT CORRECT INFORMATION Admission requirements

***PLEASE INSERT CORRECT INFORMATION**

Exit level: NQF level 8 Duration: 1-3 years Campus: Main Campus

MASTERS (MSc.)

Admission requirements:

Prospective candidates must be in possession of a good Level 8 Bachelor's degree with at least a C-grade average (i.e., 60-69% average), or a good Postgraduate Diploma from a recognized Institution

Candidates without a Bachelor's degree or a Postgraduate Diploma from UNAM, but who hold qualifications from an approved institution of higher learning, deemed to be equivalent to a good Level 8 Bachelor's degree or a good Level 8 Postgraduate Diploma from UNAM may also be considered for admission

Prospective candidates must also satisfy specific requirements of the Faculties where they intend to enrol (e.g. teaching experience for M.Ed. admission.)

- Master of Science (by thesis)
- Master of Science in Microbiology
- Master of Science in Applied Statistics & Demography
- Master of Science in Chemistry
- Master of Science in Cyber Security
- Master of Science in Geo-information (by thesis)
- Master of Science in Geology (by thesis)
- Master of Science in Industrial Biochemistry (by coursework or thesis)
- Master of Science in Information Technology (by coursework or thesis)
- Master of Science in Mathematics (Applied Mathematics)
- Master of Science in Mathematics (Pure Mathematics)
- Master of science in Nuclear Science
- Master of Science in Physics
- Master of Science in Renewable Energy
- Master of Science in Wildlife Management & Ecotourism

DOCTORATE (Doctor of Philosophy - PhD) with specialisation in:

Admission requirements:

Candidates for admission to doctoral programmes of UNAM must be in possession of a Master's degree or equivalent from a recognized institution of higher learning in the chosen field of study

Candidates with only the Bachelor's degree may initially be enrolled for a Master's degree by research only. If, during the first year of research they demonstrate exceptional abilities, they may be considered for upgrading into the Doctoral Programme:

- Science
- Computer Studies
- Industrial Biochemistry
- Geography
- Geology
- Wildlife & Ecotourism (by thesis)

