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### Welcome

Welcome to Nelson Mandela Metropolitan University! Your decision to join our ranks as a postgraduate student marks an important decision in your life as you will now have an opportunity to expand and deepen your knowledge base in your field of study. As you know, NMMU offers an increasingly wide portfolio of postgraduate programmes aimed at providing our students with higher-level theoretical and practical training. Our postgraduate programmes enjoy the highest level of support from the university as we want to ensure that you will receive the best possible training in your field.

Postgraduate education, per definition, involves more intensive, focused and sustained scholarship to enable you to gain a deeper-level knowledge and mastery over your field of study. At honours, masters' and PhD levels of study, our students are encouraged to embrace an approach to knowledge that is critical, reflective and interpretive. Our quest is for original thinking and original ways of reconstituting, expressing and explaining existing knowledge. This will require a great deal of independent thinking on your part, and a capacity for self-reflection and self-criticism of your work. Good science, regardless of discipline, only comes about through rigorous and constant critique, from one to another generation, in search of finding newer and hopefully more successful ways of solving scientific, technological and social problems in society.

Our university offers a host of support services for postgraduate students with the purpose of giving you the best possible chance of completing the requirements for graduating. We are currently busy with a major process of upgrading our on-campus postgraduate residential facilities with the view of making them centres of learning and research. Our library facilities contain a large volume of books and journals, together with online journals and databases for exclusive use by our postgraduate students. We also provide support to postgraduate students via a wide range of learning support resources to improve writing and reading skills, computer-training, and counselling support to cope with the stressful challenges of postgraduate study. We encourage you to make full use of these facilities and services on all our campuses.

We also hope that you will participate in the many social and cultural activities on and off campus in order to stimulate you to relate what you learn in your academic programmes to the wider challenges facing society.

A significant sector of our students come from other parts of the African continent, Asia, Europe and North America, and we extend our welcome to you in having chosen NMMU as a place of study. We embrace and celebrate the diversity of cultures and we hope that you will find your stay at NMMU a rich and rewarding one!

Prof Derrick Swartz NMMU Vice-Chancellor





#### Centre for Academic Engagement and Collaboration (CAEC)

The NMMU Centre for Academic Engagement and Collaboration (CAEC) facilitates and provides strategic direction for the academic engagement activities of the university. The centre also serves as a catalyst in the development of collaborative partnerships between NMMU and its external communities.

## **Locally connected** Putting NMMU in context

### We're connected ... to Nelson Mandela Bay

Greatnd great universities go hand in hand. In our case, it's Port Elizabeth - now also known as Nelson Mandela Bay as it incorporates the towns of Uitenhage and Despatch into the larger metropole - and Nelson Mandela Metropolitan University (NMMU).

The two enjoy a mutually-beneficial relationship, feeding and nurturing one another in a large number of connections through solid partnerships particularly within the motor, pharmaceutical and tourism industries. As a result, our students are exposed to and get hands-on experience long before they complete their formal tuition.

Further town and gown convergence is being forged with the multi-billion rand development of the new Industrial Development Zone and deep water harbour at nearby Coega in terms of various postgraduate research and employment opportunities.

This partnership approach means the university is better positioned to respond to changes in the knowledge environment and will ensure a better transfer of knowledge between the two.

### We're connected ... to the Eastern & Southern Cape

The Eastern Cape, the country's second largest province (nearly 14 per cent of South Africa's landmass), is home to seven of the eight biomes (plant kingdoms). Furthermore, a significant proportion of the country's automotive and ancillary industries are located in the region. In the Southern Cape, the Garden Route area is growing at an unprecedented rate. This poses new challenges in terms of the sustainability of development, particularly in relation to ecosystem services such as water, security, nature tourism assets, biodiversity and coastal and marine resources. This gives our postgraduates an ideal backdrop for their research and/or internships.

The Eastern and Southern Cape have rich cultural heritages that can provide the base for a vibrant community tourism industry. NMMU has established research centres, academic programmes and engagement entities in entrepreneurship development, marketing, management development, and creative arts and crafts that can only add value to achieving the strategic priorities of the provincial government in this respect.



### We're connected ... to South Africa

NMMU is committed to its country and as such, endeavours to meet the needs of South Africa by responding to them in terms of developing skills and encouraging research that is problem-solving and user-inspired.

#### SOME KEY PARTNERSHIPS

- The Mantis Collection, owners of Shamwari Game Reserve and other premier tourism destinations, works with NMMU on projects ranging from game lodges run on renewable energy to training for field guides.
- ➤ The developers of the multi-billion rand industrial initiative, Coega, just outside Port Elizabeth, and NMMU have a memorandum of agreement formalising the interaction of training, research, testing, advisory and consultancy services between the two.
- The Insurance Sector Education & Training Authority assisted us in introducing South Africa's first BCom degree in Financial Planning.
- Vodacom assists our students with sponsorship of postgraduate bursaries, sports facilities, HIV/Aids projects and the Missionvale Campus health clinic.
- Volkswagen SA's Student Orientation Programme for Automotive Manufacturing introduces our engineering students to the real world of work; and the company also supports upgrading for maths and science teachers.
- > Sasol supports maths and science teaching and learning projects.
- First National Bank backs our rugby club, Intervarsity and the Centre for Child Forensic Studies through their foundation.

### Stay connected:

Centre for Academic Engagement and Collaboration (CAEC) Tel: 041 504 3236 E-mail: george.delange@nmmu.ac.za

## **Globally connected**

NMMU uses its "knowledge product" to make a meaningful difference in the world well beyond the campus gates and, as such, is in the business of preparing students for a global market.

### We're connected ... to Africa

We are the most diverse university in South Africa since students come to us from across 34 African countries to obtain a first-class education. We're committed, as part of our vision, to being "a dynamic African university". And we're working hard at growing our international links with universities on the continent.

### We're connected ... to the world

We know the importance of producing students who can contribute anywhere in the world and so we remain in touch with what's new and happening by collaborating with other leading institutions in the United Kingdom, the USA, Africa and Europe. In short, we network to ensure our students are prized players wherever they find themselves.

NMMU actively develops its international partnerships not only to promote the internationalisation of our curriculum but to bolster its research and student exchange links too.

#### NMMU is proud to showcase its links with the following partner universities:

AFRICA

Zambia – Copperbelt University, Kitwe Kenya – Kenyatta University, Nairobi Uganda – Makerere University, Kampala

#### EUROPE

Belgium – Ghent University, Ghent; Provinciale Hogeschool LImberg, Hasselt Denmark – Aarhus College of Education, Aarhus

Finland – Turku School of Economics, Turku

**Germany** – Carl von Ossietzky University, Oldenburg; Eberhard Karls University, Tübingen; Johannes Gutenberg University, Mainz; Nuertingen-Geislingen University, Baden-Württemburg; Reutlingen University, Reutlingen; Ostfalia, Hochschule fur Angewandte Wissenschaften, Wolfsburg; Evangelische Faschhochschule Darmstadt, Darmstadt; University of Applied Sciences, Ingolstadt; University of Applied Sciences, Mittweida; University of Applied Sciences, FH Münster; University of Applied Sciences, FH Osnabreuck. University of Applied Sciences, Stuttgart; University of Applied Sciences, FH Wedel University of Osnabreuck, Osnabreuck

**Netherlands** – Arnhem Business School, HAN University of Applied Sciences, Arnhem and Nijmengen; Utrecht University, Utrecht; Vrije University, Amsterdam

**Norway** – Agder University College, Kristiansand; University of Stavanger, Stavanger Oslo University College, Oslo; Ostfold University, Halden; Buskerud University College, Kongsberg

Sweden – Gotheborg University, Gotheborg

**United Kingdom** – Keele University, near Newcastle-under-Lime

**France** – Ecole Nationale d'Ingenieurs de Metz: ENIM College, Metz; Ecole d'Ingenieurs, ECAM Group, Lyon; IDRAC Ecole Supérieure de Commerce, Paris and Lyon; Institut Supérieur de Commerce International de Dunkerque, Dunkerque; EPITECH: Paris **Northern Ireland** – Stranmillis University College, Belfast

#### NORTH AMERICA

United States of America – College of Saint Benedict/ St John's, Minnesota; California State University, Fullerton; St Cloud State University, Minnesota.; California State University System; University of Mississippi, Oxford.; University of Missouri, Columbia; University of North Carolina, Wilmington; University of Northern Iowa, Cedar Falls/ Waterloo; University of Washington, Seattle

Mexico – Udla University: Puebla

ASIA Japan – Osaka Gakuin University, Osaka

#### DID YOU KNOW?

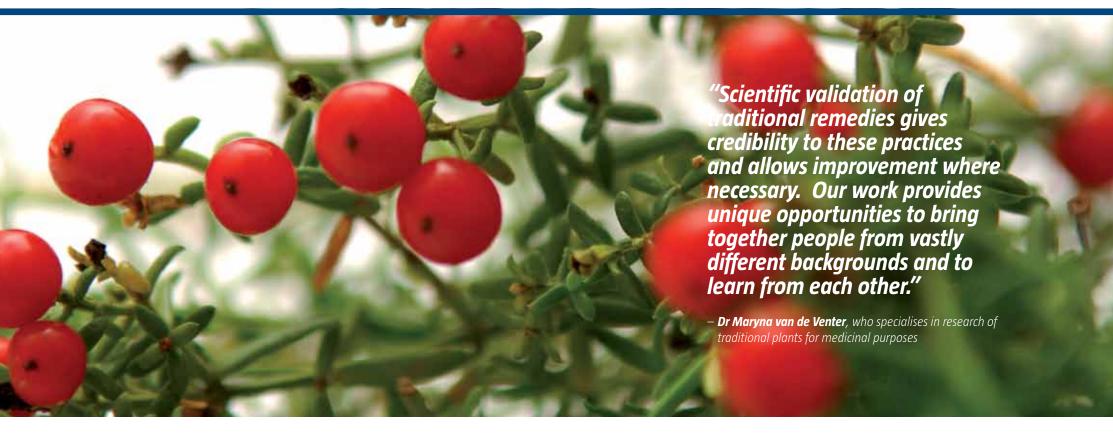
Port Elizabet

- 60% of our international students are from other African countries.
- NMMU has agreements and contracts with a variety of multi-national companies.
- The link between the German Academic Exchange Service (DAAD), Volkswagen South Africa and NMMU in automotive engineering education is an example of interaction that not only benefits external partners, but prepares our students to be globally competitive.

### Stay connected:

Office for International Education Tel: 041 504 2161 E-mail: international@nmmu.ac.za Website: www.nmmu.ac.za/international

## Towards indigenous knowledge ...



### Home grown

ndigenous knowledge has immense value. Its wealth, however, is not limited to what the hidden spiritual, environmental, agricultural and other kinds of knowledge of yesteryear can offer western science today. Rather, it focuses on what it can offer both modern science and those who depend on the preservation of indigenous knowledge for cultural survival. NMMU recognises this in its research of indigenous medicinal plants, indigenous knowledge systems and languages, like Afrikaans, so that its postgraduate research endeavours to be practical rather than solely intellectual.

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## Towards serving society ....



## Fighting a pandemic

MMU is a new generation university. It exists to serve society. And right now its focus is firmly on reducing the health crisis facing Africa – the scourge of HIV/Aids. UNAIDS estimates that 5.6 million, or one in nine people in South Africa, is living with Aids, while globally, new HIV infections have risen by 4.3 million. Several faculties and the HIV/AIDS Unit work together on various research projects with postgraduates from around the world to be the hands, feet and voice in the fight against the pandemic.

## Towards motor manufacturing technology ....

MAIN BODY TACK WELD

"The VWSA-DAAD International Chair in Automotive Engineering is strongly involved in applied research on all academic levels. Here students receive highly sought-after qualifications that prepare them for leadership positions in the motor industry."

- Former Chair Prof Hinrich Holdack-Janssen

### **Engineered for success**

elson Mandela Bay is the "Detroit of Africa", the place where cars – and automotive careers – are made. Many of those careers are kick-started at our university with its diverse business and engineering links with the motor industry. Cutting-edge research in friction stir welding and rubber research in vulcanisation chemistry, student exchange programmes with international universities and practical design projects, robotics and mechatronics in state-of-the-art laboratories make NMMU, the hands-on university of choice for mechanical and industrial engineers.

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## Towards innovation ...

"What's happening here is what happens under the earth's crust over many millions of years. We are just speeding up the process."

 InnoVenton director **Prof Ben Zeelie**, of the Chemistry Department which currently has more than 30 masters' and doctoral students.

### Cleaner, greener energy

The depletion of the world's oil reserves, together with growing global pressure to go "green", has resulted in a race worldwide to generate sustainable renewable energy – a challenge NMMU has embraced. Harnessing cutting-edge technology, InnoVenton, the university's internationally-recognised institute for chemical technology, is using micro algae to convert harmful carbon dioxide from the atmosphere into a bio-oil, not unlike crude oil, and other useful products. The new technology, could minimise the environmental harm caused by carbon dioxide emissions from power plants and factories. "For every kilogram of algae biomass produced, about two kilograms of carbon dioxide have been taken out of the air," says InnoVenton director Prof Ben Zeelie. InnoVenton strives to develop new technologies for the downstream chemical industry. To date, some 200 companies have taken advantage of the significant infrastructural and knowledge capabilities within the institute.

## Towards marine sustainability ...

"Our passion is the conservation and management of estuaries, the dynamic meeting place of rivers and sea. We are fortunate to work with a multidisciplinary team of scientists from torughout the country to ensure the sustainable use of estuary resources."

### **Coastal guardians**

key to mankind's survival will be his ability to detect, understand and forecast changes within our oceans and along our coastlines. The university's Integrated Environmental and Coastal Management research entity does this. And the picture isn't pretty. Marine and coastal ecosystems are changing at an unprecedented rate with the decline in marine resources, the loss of coastal habitat due to development and the pollution of our coastal waters. Now is the time for action which involves innovative research, interaction with all sectors of society and alignment of research objectives with national policies in order to ensure long-term sustainability of the natural environment.

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## Towards sustainable conservation ...



### **Eco-warriors**

ith the world's ecosystems increasingly under threat, Nelson Mandela Metropolitan University strives to seek and implement solutions that can make a difference. The widely-acclaimed work of NRF A1-rated botany professor Richard Cowling – 2009 recipient of the prestigious Gold Medal from the Southern Africa Association for the Advancement of Science – has made him one of the world's leading authorities in conservation science. Working closely with stakeholders, other scientists and postgraduate students, Prof Cowling has mapped the locality of Eastern Cape "ecosystem services" – nature's services to man – and identified strategies to safeguard them. He is also part of a team of scientists spearheading a unique project, in which spekboom – a hardy succulent shrub with an extraordinary ability to store carbon – is being planted in degraded veld in several nature reserves, and 300 trial plots across the Eastern Cape.

## Towards a nuclear future ...



### A new vision

MMU is the country's leading academic institution in the field of nanoscience and electron microscopy, where materials are analysed at miniscule levels. The university's new High Resolution Transmission Electron Microscopy (HRTEM) Centre – which will house four state-of-the-art electron microscopes of which two can analyse materials right down to atomic level – will be the most sophisticated and advanced electron microscopy centre in Africa, once the new building is completed in mid-2011. The R8Om suite of microscopes can be used across a multitude of fields like synthetic fuels technology, nuclear energy reactor materials, diamond cutting and drilling tools, minerals, metal alloys used in the automotive industry and optical sensors and electronic devices. The centre – the realisation of a dream longheld by Prof Jan Neethling, one of South Africa's most experienced electron microscopists and a foremost researcher on a wide range of materials including those to be used in future high temperature nuclear reactors – has been designed to accommodate up to 24 MSc and PhD students specialising in nanoscience. Bursaries for postgraduate studies are provided by the National Research Foundation, Sasol and Element Six.

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## Towards renewable energy ...



### Let the sun shine

f Africa is to achieve social and economic development in keeping with its demographic growth, its energy consumption will soar and alternative, environmentally friendly, sources will have to be sought and used. The Centre for Energy Research at NMMU was launched to do just this – to seek solutions in finding sustainable energy alternatives to unfriendly global warming fossil fuels like coal. Solar energy in the form of photovoltaics (solar cells) and solar water heating, energy management and control in the field of automotive energy, wind energy, energy efficiency, energy economics, and energy materials are all researched at the centre under the innovative and competitive eye of experts in science, engineering, the built environment, information technology, economic sciences, conservation ecology and manufacturing technology.



"At NMMU we unlock people's futures. We help them reach their full potential and realise their dreams and aspirations."

## Why NMMU?

If we have not already piqued your curiosity with a visual feast of what NMMU can offer postgraduate students, then perhaps the following reasons will help you to consider why you would benefit from studying at our new generation university.

**Our centres of excellence.** NMMU has several key programmes and entities in which we shine. These include our architecture, BCom Accounting, engineering, the built environment and science programmes, along with various engineering, technology and conservation entities.

**Our partnerships.** NMMU prides itself in having pro-active links with industry (automotive, tourism, pharmaceutical and more) in which both parties benefit. **Our world experts.** Among others, botanist Prof Richard Cowling is an international expert in plant conservation, Prof Jan Neethling is sought after globally for his knowledge in research at atomic level while Prof Danie Hattingh is world-renowned for his research into friction stir welding for the manufacturing industry.

**Our multiculturalism.** NMMU has a large contingent of foreign students who make up about 8% of the student body. Our African students, for example, hail from 34 different countries on the continent.

**Our lifestyle.** The relaxed and safe environment within which our university is located (close to the sea for four of the six campuses), goes a long way to promoting a sense of security among staff and students.

**Our accessibility.** NMMU recognises prior learning, making it possible for many students-to-be to embark on postgraduate studies.

## NMMU at a glance

We are a new generation university. We nurture innovation, foster creativity, embrace technology and develop postgraduates to meet the challenges of tomorrow. We offer quality education from certificate through to doctoral level to about 26 000 students on six campuses, five in Nelson Mandela Bay and one in George.

Like the words of the man after whom the university is named, we know that "the future is in our hands" and that we have an important role to play in society at large. Part of that role is in supporting our postgraduate students and their research.

## Why postgraduate studies?

Whether you're pursuing an academic or a professional career, aiming for success in the private or the public sector, or just want to add value to your personal development, postgraduate studies offer the opportunity to deepen your understanding and sharpen your skills, to specialise and to focus on what really interests you.

#### POSTGRADUATE QUALIFICATIONS

### NMMU's seven faculties and its George Campus offer postgraduate qualifications which are structured as follows:

- ▶ Bachelor honours degree (eg Baccalaureus Artium Honores)
- Postgraduate diploma
- Master's degree (eg Magister Scientiae), including the MTech (Magister Technologiae) by coursework or dissertation
- > Doctoral degree (eg Doctor Commercii), including the DTech (Doctor Technologiae)

At NMMU we offer some 320 different postgraduate programmes across a vast range of disciplines, but like all higher education institutions we have our strengths (see flagship pages 4 - 11) and focus areas.

### **Research strengths**

Much of NMMU's research occurs within the following focus areas, but is not limited by it:

- > The environment and ecology (including environmental law)
- Marine and estuary studies
- Optic fibres and electron microscopy
- Mathematics and science education
- Nursing and community health
- Architecture and the built environment
- Engineering technology (including friction stir welding)
- Art and design
- Chemical technology
- IT programming and IT systems support
- Academic development (especially for disadvantaged students)

According to the university's strategic plan, one to three focus areas are identified within each faculty. Resources will be directed towards these areas and, research institutes within these areas have or will be established.

NMMU already has a number of focused institutes, centres and units aimed at promoting research, technology transfer and innovation. These structures form the hub of centres of excellence in research. (See contact details in faculty pages).

## Admission

The admission requirements to the various postgraduate programmes offered by NMMU consist of the statutory admission requirements, as well as more specific requirements to certain programmes. This information is included within the faculties' section.

Holders of qualifications awarded by international universities should note that they may be required to submit their qualifications for validation by the Centre for the Evaluation of Foreign Educational Qualifications at the South African Qualifications Authority. NMMU's Office for International Education can assist in this validation process.

### How to apply

Candidates not previously registered at NMMU must complete an application form for admission to the University (form NMMU 516), as well as an application form for admission to Postgraduate Studies (form U.24). Application forms can be obtained from Student Admissions or downloaded from the university website: www.nmmu.ac.za

Applicants, who have obtained their immediately preceding degree at NMMU, only complete the application form for Postgraduate Studies (U.24)

In addition to these forms, departmental application forms may also have to be completed. More information can be obtained from the relevant faculty officer.

An application fee is payable. The prescribed fee must accompany the application forms.

All applications for admission are subject to selection. An applicant will be notified in writing of the outcome of his/her application.

A student who enrolls at NMMU for the first time must also provide certified copies of degrees already obtained, as well as complete academic records if the previous degree was obtained from another university.

Please take note that the admission and registration process for research degrees by dissertation or thesis is a more lengthy process. Consult the relevant head of department, programme coordinator or faculty officer for further information.

### Important dates

The closing date for application and registration for honours degree programmes is the same as for undergraduate programmes -1 August of each year.

Closing dates for application and registration for coursework master's degree programmes differ from programme to programme and may be followed by interviews and selection processes. Consult the relevant faculty officer.

First-time postgraduate research degrees (master's and doctoral) are permitted to register throughout the year, although re-registration for continuing students must take place before March 1.

Please consult Academic Admissions or Faculty Administration for detailed information on the closing dates for applications.

### **Recognition of Prior Learning (RPL)**

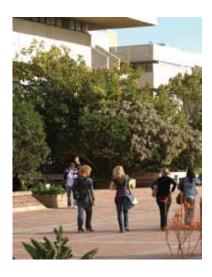
The university subscribes to a national policy of increasing access to higher education. Recognition of Prior Learning (RPL) has particular reference to prospective mature students who seek formal acknowledgement and assessment of the skills, knowledge and competencies acquired during formal or informal learning situations, and wish to gain admission to a formal university programme.

RPL entails a formalised comparison of the previous learning and experience of a learner against the learning outcomes required for a specified qualification.

Each faculty reserves the right to set their own assessment criteria in addition to those specified by Senate, which is responsible for academic governance.

The admission of postgraduate research candidates based on RPL guidelines is guided by one or more of the following:

- ▶ Relevant existing academic qualifications
- Previous research experience
- Previous professional experience in an area relevant to the proposed field of study
   Existing language proficiency in terms of oral and written communication skills
   Candidates who apply for admission via RPL should submit a portfolio of evidence to demonstrate their competence.



### Stay connected:

Port Elizabeth campuses: Admissions Office PO Box 77000 Nelson Mandela Metropolitan University Port Elizabeth 6031 South Africa

Tel: 041 504 2001 E-mail: admissions@nmmu.ac.za

George Campus: Admissions Office Nelson Mandela Metropolitan University Private Bag X6531 George 6530 South Africa

Tel: 044 801 5031 E-mail: george-info@nmmu.ac.za



### Stay connected:

Financial Aid Office Tel: 041 504 2550 E-mail: financialaid@nmmu.ac.za Website: www.nmmu.ac.za

Research Capacity Development Tel: 041 504 2538 E-mail: RCD@nmmu.ac.za Website: www.nmmu.ac.za

## **Financial matters**

Applicants can obtain a complete guide on the fees structure or download it from www.nmmu.ac.za

### Fees payable

**Application fees:** All postgraduate applicants pay an application fee. This is not refundable.

**Enrolment fees:** Enrolment fees shall be debited to students' accounts and are payable every year. Enrolment fees are not refundable and a student is liable for the fee in the event of a cancellation.

**Registration fees:** A registration fee is the first advance payment of tuition fees. This set deposit is paid upon registration, while the balance is normally due by the end of April. First-time candidates who register after April are required to pay both the registration and tuition fees upon registration.

**Tuition fees:** These fees vary according to qualifications and programmes. Information can be downloaded from www.nmmu.ac.za

**Accommodation fees:** Residence fees are raised per semester. They cover the academic semesters and exclude all vacations. However, postgraduate students living in the Postgraduate Village on South Campus, Summerstrand, may, if for research purposes, apply for permission to stay in residence for 12 months. Please contact Student Housing Management on 041 504 3941 or e-mail khotso.bada@nmmu.ac.za

#### **INTERNATIONAL STUDENTS**

International students are required to pay all fees in full prior to registration. Residence fees are also payable in advance. Please contact the Office for International Education for assistance. Tel +27 (0) 41 504 2161 or e-mail international@nmmu.ac.za

All fees change annually, and the university reserves the right to change tuition fees without prior notice.

### **Bursaries**

NMMU has a number of bursaries and scholarships available for academically deserving students. A comprehensive overview of this information can be obtained from the Financial Aid Office (for honours degree programmes) and the Department of Research Capacity Development (for master's, doctoral and postdoctoral research).

Briefly, however, financial support in the form of scholarships and bursaries includes:

#### NMMU administered and managed bursaries and scholarships

A host of financial support opportunities are managed by the RCD. These bursaries/ scholarships have different sources of funding and therefore different selection criteria. Application forms are obtainable from Research Capacity Development.

Among others, NMMU awards:

#### NMMU Postgraduate Research Scholarships

All full-time and part-time students registered for master's or doctoral study at NMMU will be eligible to apply for these scholarships, including foreign students. Students' research should preferable fall within the focus areas of NMMU (see page 12). Academic merit will be a criterion.

#### **NMMU Financially Needy Bursaries**

These bursaries are available to masters' and doctoral students who qualify on merit for the postgraduate research scholarship, but are financially disadvantaged.

#### NMMU/Vodacom Postgraduate Scholarships

Scholarship recipients are limited to full-time full-research master's and doctoral students.

#### Independent bursaries and scholarships

Applications should be sent directly to the donor. Please consult the Research Capacity Development bursary booklet for donor information.

#### NRF scholarships and bursaries

NMMU in collaboration with the National Research Foundation offers financial support through:

- Freestanding scholarships and fellowships to full-time study (or part-time study in the case of disabled students) on a competitive basis; and
- Grant-holder linked assistantships and bursaries granted to researchers whose research ties in with the NRF focus areas.

Information can be obtained directly from the NRF website: www.nrf.ac.za or from Research Capacity Development.

#### International funding and collaboration

International funding and collaboration opportunities are provided by:

- Canon Collins Trust (www.canoncollins.org.uk/scholarships)
- Commonwealth (contact RCD for information)
- DAAD (Deutscher Akademisher Austrausch Dienst) (enquiries should be directed to Mrs Helga Islam - Islam@daad.de)
- First Rand Educational Trust (contact RCD for information) www.daad.de/deutschland/index.en.html)



### Stay connected:

On- and off-campus accommodation: Mr Khotso Bada Tel: 041 504 3941 E-mail: khotso.bada@nmmu.ac.za

Private off-campus accommodation: Mr Marius Jordaan Tel: 041 583 5276/2477 E-mail: marius.jordaan@nmmu.ac.za

Accommodation for international students: Tel: +27 (0) 41 504 2161 E-mail: international@nmmu.ac.za

## Accommodation

Along with your decision to study further, come the practicalities of where to live during this important time. Nelson Mandela Metropolitan University endeavours to make this an easy task.

The university has accommodation especially earmarked for postgraduates on campus and has useful contacts for off-campus digs all within easy walking distance of NMMU in the neighbouring beachfront suburbs. However, since Port Elizabeth is a city with a small-town ambience, wherever you live, you are not too far from anything – the university, the shops or the beach.

#### **ON CAMPUS**

NMMU offers postgraduate accommodation at either the Postgraduate Student Village or in single room accommodation. This accommodation is open to doctoral, master's, honours and fourth-year students on a first-come, first-served basis. The Postgraduate Village has one-, two- and three-bedroom units and some units cater for disabled students. Each unit has a fully-equipped kitchen, a lounge and patio.

#### **OFF CAMPUS**

Off-campus accommodation for students is mainly situated in the suburb of Summerstrand, adjacent to North and South campuses. Summerstrand is a beachfront suburb and home to the Boardwalk Casino complex, the Summerstrand Village shopping centre, the Humewood Links golf course, several other tourist attractions and the university itself. Many of the suburb's residents have opened their homes to students, who live in garden cottages or flatlets attached to the main residence.

Students also rent entire houses or townhouses and share accommodation and living costs. Humewood, another beachfront suburb slightly further from the university with an abundance of flats, is another popular accommodation option for students.

The official off-campus accommodation consists of three facilities: Rubin Crescent, Gomery Place and Annie's Cove.

The university is also developing new accommodation within its grounds for a further 450 students.

### Stay connected:

Research Capacity Development Tel: 041 504 2538 E-mail: RCD@nmmu.ac.za

Student Academic Development (The Writing Centre) Tel: 041 504 2759 E-mail: sarie.snyders@nmmu.ac.za

#### **Library and Information Services**

Tel: 041 504 2281 (South Campus, Summerstrand) Tel: 041 504 3026 (North Campus, Summerstrand) Tel: 041 504 3846 (2<sup>nd</sup> Avenue Campus) Tel: 041 504 1144 (Missionvale Campus) Tel: 044 801 1144 (George Campus) E-mail: library@nmmu.ac.za

ICT Services Tel: 041 504 3000 E-mail: helpdesk@nmmu.ac.za

Student Counselling, Career & Guidance Centre Tel: 041 504 2511/3222 Tel: 044 801 5051 E-mail: counselling@nmmu.ac.za

Graduate and Student Placement Office Tel: 041 504 2619/2951 E-mail: nontlantla.xako@nmmu.ac.za

Alumni Office Tel: 041 504 3935 E-mail: alumni@nmmu.ac.za



"We serve as a catalyst that links our students with the world of employment and entrepreneurship, thus helping them round off their academic journey through NMMU while giving them a platform to help realise their career goals."

– Ronel Rizza, senior manager:
 Graduate and Student Placement

### Stay connected:

Student Counselling, Career & Guidance Centre Tel: 041 504 2511/3222 Tel: 044 801 5051 E-mail: counselling@nmmu.ac.za

Graduate and Student Placement Office Tel: 041 504 2619/2951 E-mail: nontlantla.xako@nmmu.ac.za

Alumni Office Tel: 041 504 3935 E-mail: alumni@nmmu.ac.za

## Student support

NMMU understands the pressures of postgraduate studies and has a number of support services – from counselling to help with academic writing – to assist you in reaching your academic goals.

### Development of academic skills

The Department of Research Capacity Development (RCD) focuses on the mentoring and development of new and emerging researchers by means of workshops in the fields such as research methodology, and budget and project planning. This service is supplemented by similar training provided by academic departments and faculties.

The NMMU Writing Centre offers a professional service to all students in terms of writing reports, assignments, etc. The centre also provides candidates with a list of appropriate editors who offer their services at a fee.

### Library and Information Services

NMMU offers access to many methods of retrieving information. Professional staff will assist you in developing your knowledge via its books, catalogues, online databases, newspapers, journals and e-books. Library and Information Services practice interlibrary lending and offer postgraduate training in various aspects of information retrieval.

### ICT assistance

Postgraduate students can register at Information and Communication Technology Services to obtain access to various computing facilities. ICT Services can also help you convert your final research document in the required format for submission to the examinations office. Computer literacy classes are also offered.

### Career guidance and counselling

The Student Counselling, Career and Development Centre offers various services to enhance wellness and growth during student studies. Not only does this centre provide professional counselling when life gets tough, but also offers career guidance and assessment.



## Aftercare

### **Career services**

Obtaining a postgraduate qualification will give you valuable skills that employers want. NMMU offers assistance in helping you find the right career through its Student Counselling, Career and Development Centre.

### Graduate placement

NMMU goes further by also offering help in the job market with its extensive graduate placement network. Apart from its annual Careers Fair in July when more than 100 different employers visit the institution, the university has an office dedicated to assisting students with internships and permanent employment.

### Alumni network

NMMU likes to keep in touch with its graduates. It does so through its Alumni Office. There are about 91 000 NMMU alumni spread throughout the world. Regular alumni events are hosted in South Africa and overseas as part of the university's goal to share in the lifelong journey of its graduates.

"We view students in a holistic way and provide them with professional services and programmes that help them become – and stay – the best they can be."

 Marina de Jager, Senior student counsellor of NMMU's Student Counselling, Career and Developmental Centre.

## Qualifications

#### Qualification

#### FACULTY OF ARTS

#### HONOURS DEGREES

BAHons (Afrikaans and Dutch)	26
BAHons (Applied Language Studies)	26
BAHons (Anthropology)	
BAHons (Corporate Communication)	
BAHons (English Studies)	26
BAHons (French)	26
BAHons (Group Dynamics)	
BAHons (History)	29
BAHons (isiXhosa)	26
BAHons (Journalism)	26
BAHons (Media Studies)	
BAHons (Philosophy)	26
BAHons (Political Science)	
BAHons (Public Administration & Management)	
BAHons (Sociology)	

#### MASTER'S DEGREES

MArch (Professional Architecture)	
MArch (Architecture)22	
MArch (Architectural Computing)	1
MA (African Language Studies)	,
MA (Afrikaans & Dutch)	
MA (Anthropology)29	)
MA (Applied Language Studies)	
MA (Conflict Transformation & Management)	
MA (English Studies)	
MA (French)	)
MA (History)	)
MA (isiXhosa)	)
MA (Media Studies)	)
MA (Political Science)	1
MA (Public Administration)	)
MA (Sociology) – General or Group Dynamics	)
MMus (Applied Choral Conducting)25	)
MMus (Composition)	)
MMus (Music Education)25	)
MMus (Musicology)25	
MMus (Music Technology)25	)
MMus (Performing Arts)	
MPhil (South African Politics & Political Economy)	)

#### Qualification

page

MDbil (Dhilosophy)	26
MPhil (Philosophy)	
MPhil (Public Administration)	29
MPA (Public Administration)	29
MTech (Architectural Technology)	22
MTech (Ceramic Design)	24
MTech (Fashion Design)	24
MTech (Fine Art)	24
MTech (Graphic Design)	24
MTech (Multimedia)	24
MTech (Photography)	24
MTech (Public Management)	29
MTech (Public Relations Management)	26
MTech (Textile Design & Technology)	24

#### DOCTORAL DEGREES

22
27
27
27
27
27
25
27
29
29
29
29
27
25
29
29
29

#### FACULTY OF BUSINESS & ECONOMIC SCIENCES

#### POSTGRADUATE DIPLOMA

PGDip (Financial Planning)
----------------------------

#### HONOURS DEGREES

BComHons (Accounting)	4
BComHons / BAHons (Business Management)3	8

#### Qualification

page

BComHons / BAHons (Economics)	35
BComHons / BAHons (Industrial & Organisational Psychology)	37
BComHons / BAHons (Labour Relations & Human Resources)	37
BComHons (Tourism)	35

#### **MASTER'S DEGREES**

MCom (Accounting)	.34
MCom (Business Management)	.38
MCom / MA (Economics)	.35
MCom / MA (Labour Relations & Human Resources)	. 37
MCom / MA (Industrial Psychology)	. 37
MCom (Taxation)	
MA (Development Studies)	
MTech (Business Administration)	.38
MTech (Cost හ Management Accounting)	.34
MTech (Entrepreneurship)	.38
MTech (Human Resources Management)	. 37
MTech (Logistics)	.38
MTech (Marketing)	.38
MBA (Business Administration)	

#### **DOCTORAL DEGREES**

DCom / PhD (Accounting)	34
DCom / PhD (Business Management)	38
DPhil (Development Studies)	35
DCom / PhD (Economics)	35
DCom / PhD (Industrial & Organisational Psychology)	37
DCom / PhD (Labour Relations and Human Resources)	37
DTech (Human Resources Management)	37
DTech (Logistics)	38
DTech (Marketing)	38
DBA (Business Administration)	40

#### FACULTY OF EDUCATION

#### POSTGRADUATE CERTIFICATES

PGCE (Further Education &	Training)44
PGCHE (Higher Education)	

#### HONOURS DEGREES

BEdHons (Whole School Development & Educational Psychology)	44
BEdHons (Mathematics Education & Science Education)	44
BEdHons (Mathematical Literacy)	44

#### page

### FACULTY OF ENGINEERING, THE BUILT ENVIRONMENT & INFORMATION TECHNOLOGY

#### POSTGRADUATE DIPLOMAS

PGDip (Built Environment)	53
PGDip (Construction Management)	53

MEd (Special Needs Education) ......44

#### HONOURS DEGREES

Qualification

MASTER'S DEGREES

DOCTORAL DEGREES

BScHons (Construction Management)53	3
BScHons (Quantity Surveying)	3

### MASTER'S DEGREES

MSc (Built Environment):	
– Facilities Management	53
– Property Economics & Valuation	53
– Project Management	53
– Construction Management	53
– Construction Health & Safety Management	53
MSc (Construction Economics)	
MSc (Construction Management)	53
MTech (Civil Engineering)	50
MTech (Construction Management)	53
MTech (Electrical Engineering)	50
MTech (Industrial Engineering)	50
MTech (Information Technology)	54
MTech (Mechanical Engineering)	50
MTech (Operations Management)	50
MTech (Quantity Surveying)	
MEng (Mechatronics)	50

#### DOCTORAL DEGREES

#### Qualification

page

PhD (Construction Management)	53
PhD (Information Technology)	
PhD (Mechatronics)	50
DTech (Civil Engineering)	50
DTech (Construction Management)	53
DTech (Electrical Engineering)	50
DTech (Mechanical Engineering)	50
DTech (Operations Management)	50
DTech (Quantity Surveying)	53

#### FACULTY OF HEALTH SCIENCES

#### POSTGRADUATE DIPLOMA

PGDip (Health & Welfare Management	
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#### HONOURS DEGREES

BAHons/BSc (Human Movement Science) – General Curriculum	60
BAHons (Human Movement Science) – Biokinetics	60
BAHons (Human Movement Science) – Sport Science	60
BAHons (Psychology)	66
BAHons(SW) – Social Work	59
BAHonsSW(ProbWork) – Probation Work	59
BCurHons (Advanced General Nursing Science) – Operating Theatre	
Nursing Science	62
BCurHons (Advanced Midwifery & Neonatal Nursing Science)	62
BCurHons (Advanced Psychiatric Nursing Science)	62
BCurHons (Advanced Primary Health Care)	62

#### **MASTER'S DEGREES**

MA (Clinical Psychology)	66
MA (Counselling Psychology)	66
MA (Health & Welfare Management)	59
MA (Human Movement Science)	60
MA (Human Movement Science) – Biokinetics	60
MA (Human Movement Science) – Sport Science	60
MA (Psychology)	66
MA (Social Work)	59
MA (Social Work) – Clinical Social Work	59
MA (Social Work) – Social Development Planning	59
MCur (Research)	62
MCur (Advanced Nursing Science)	62
MCur (Advanced General Nursing Science) – Advanced Medical $\mathfrak{S}$	

#### Qualification

Surgical Nursing Science	62
MCur (Advanced Clinical Midwifery & Neonatal Nursing Science)	62
MCur (Advanced Psychiatric Nursing Science)	62
MCur (Advanced Primary Health Care)	62
MCur (Advanced Nursing Education)	62
MPharm (Pharmacy)	64
MSc (Pharmacy)	64
MTech (Biomedical Technology)	58
MTech (Diagnostic Radiography)	58
MTech (Environmental Health)	59

#### DOCTORAL DEGREES

DCur (Nursing Science)	62
PhD (Pharmacy)	
DPhil (Human Movement Science)	
DPhil (Psychology)	66
DPhil (Social Development Professions)	59
DTech (Biomedical Technology)	58
DTech (Environmental Health)	59

#### FACULTY OF LAW

#### **MASTER'S DEGREES**

LLM (Research)	70
LLM (General coursework programme)	70
LLM (Criminal Justice)	70
LLM (Labour Law)	70
LLM (Taxation)	70
LLM (Private Law)	70
LLM (Public Law)	70
LLM (Mercantile Law)	70

#### DOCTOR OF LAW (LLD) ......70

#### FACULTY OF SCIENCE

#### HONOURS DEGREES

BScHons (Applied Mathematics)	78
BScHons (Biochemistry)	75
BScHons (Botany)	81
BScHons (Chemistry):	
– Physical/Polymer Chemistry	75

#### page

page

#### Qualification

– Organic Chemistry	75
– Inorganic Chemistry	
BScHons / BAHons / BComHons (Computer Aided Learning)	
BScHons (Computer Science & Applied Mathematics)	
BScHons / BComHons (Computer Science & Information Systems)	78
BScHons (Formulation Science)	75
BScHons (Geography)	81
BScHons (Geographical Information Systems)	
BScHons (Geology)	81
BScHons (Mathematics)	78
BSc / BComHons (Mathematical Statistics)	78
BScHons (Microbiology)	75
BScHons (Physics)	78
BScHons (Zoology)	

#### **MASTER'S DEGREES**

MSc (Biochemistry)	. 75
MSc (Botany)	. 81
MSc (Chemistry)	. 75
MSc (Computer Aided Learning)	.78
MSc / MCom (Computer Science & Information Systems)	.78
MSc (Geography)	. 81
MSc (Geology)	. 81
MSc / MCom (Mathematics)	
MSc (Applied Mathematics)	.78
MSc / MCom (Mathematical Statistics)	.78
MSc (Microbiology)	.75
MSc (Physics)	
MSc (Textile Science)	. 75
MSc (Zoology)	. 81
MTech (Agriculture)	. 81
MTech (Chemistry)	. 75
MTech (Chemistry) – Product & Process Development	. 75
MTech (Game Ranch Management)	. 81

#### **DOCTORAL DEGREES**

PhD (Biochemistry)75
PhD (Botany)
PhD (Chemistry)75
PhD (Computer Science & Information Systems)
PhD (Geography)
PhD (Geology)

#### page Qualification

PhD (Mathematics)78	Ph
PhD (Mathematical Statistics)	Ph
PhD (Microbiology)75	Ph
PhD (Physics)	Ph
PhD (Textile Science)75	Ph
PhD (Zoology)	Ph
DTech (Agriculture)	DT
DTech (Chemistry)75	DT
Doctor of Science (DSc)(please consult faculty officer)	Do

#### GEORGE CAMPUS

#### MASTER'S DEGREES

MTech (Agriculture)	84
MTech (Forestry)	84
MTech (Nature Conservation)	84
MBA (Business Administration)	84

#### DOCTORAL DEGREES

DTech (Agriculture)	84
DTech (Nature Conservation)	84

#### CAREER-ADVANCEMENT PROGRAMMES

Although these programmes are not regarded as postgraduate qualification per se, it has been included due to their relevance to the professional development of mature students.

#### FACULTY OF ARTS

Advanced Certificate in Education (Arts & Culture)	25
Advanced Diploma in Applied Choral Conducting	25

#### FACULTY OF BUSINESS & ECONOMIC SCIENCES

Academic programmes	
National Diploma (Management)	40
BCom (Business Studies)	40
BTech (Business Administration)	40
ABP (Advanced Business Programme)	40
Management programmes	
BBP (Basic Business Principles Programme)	40
FLP (Foundation Leadership Certificate Programme)	40

#### page Qualification

ILP (Intermediate Leadership Certificate Programme)	40
BMP (Business Management Programme)	40
ALP (Advanced Leadership Certificate Programme)	40
MDP (Management Development Programme)	40
EDP (Executive Development Programme)	40

#### FACULTY OF EDUCATION

#### UPGRADING PROGRAMMES

#### National Professional Diploma in Education

NPDE (Foundation Phase)
NPDE (Intermediate Phase)
NPDE (Senior Phase)
NPDE (Further Education & Training)
Advanced Certificates in Education
ACE (Special Needs Education) – Remedial Education
ACE (HIV/AIDS in Teaching)
ACE (Mathematics Literacy) – FET
ACE (Mathematics, Science & Technology Education)
- Senior Phase43
ACE (School Management & Leadership)43
Bachelor of Education (for upgrading purposes)
BEd (Foundation Phase)43
BEd (Intermediate Phase)43
BEd (FET) – Mathematics
Honours degrees
BEdHons – Whole school development and educational pshychology44
BEdHons – Mathematics Education and Science Education
BEdHons – Mathematical Literacy
Petrions Muthematical Electory

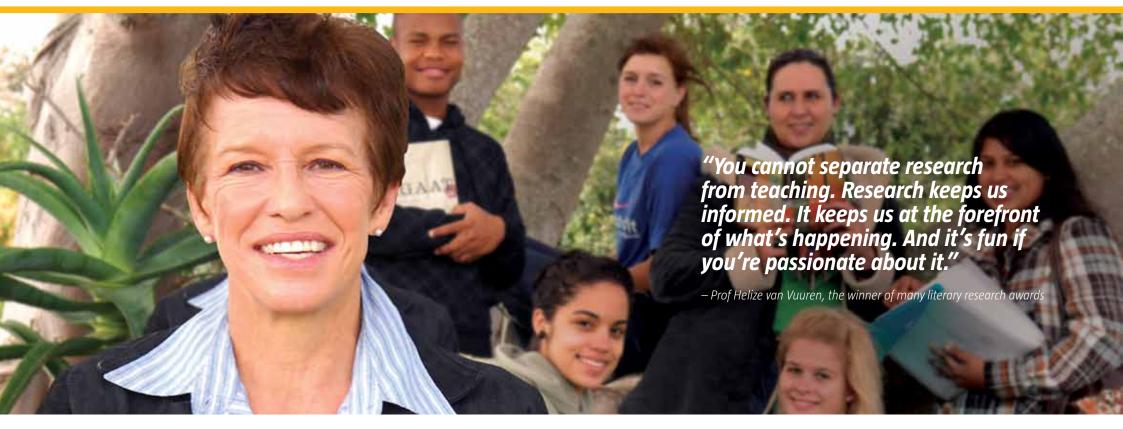
#### FACULTY OF HEALTH

#### Diplomas and degrees for career advancement

DipCNS (Community Nursing Science)	62
DipNE (Nursing Education)	
DipNA (Nursing Administration)	
DipNNS (Nephrology Nursing Science)	
BCur (I et Al) (Nursing Administration)	

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### **Guardian of South African Literature**

South African stories, whether written or told, are the research focus areas of NMMU professor of literature **Prof Helize van Vuuren**.

English and Afrikaans literature, and especially Khoi and San orality, means postgraduate students are spoilt for choice when it comes to research topics under the guidance of a highly-knowledgeable supervisor. (Prof Van Vuuren has two master's degrees, one in Afrikaans and Dutch, and the other in English, as well as a DLitt and a postdoctoral degree in comparative literature.)

This Faculty of Arts Researcher of the Year winner has published extensively on Afrikaans and South African English literature in a comparative and socio-historical framework and written a book on Van Wyk Louw's poetry and co-edited another on the oeuvre of Karel Schoeman.

Prof Van Vuuren also collaborates in co-authoring articles with her master's and doctoral students.

"To see my students publish numerous articles and gain self-confidence has been a singular surrogate pleasure," says the woman whose own story has taken her well beyond the printed word to the oral tradition of South Africa's ancient people.

Prof Van Vuuren presently coordinates a five-year National Research Foundation project entitled *Identity and Marginality in South African Literature*. Her particular focus here is on San oral traditions at the interface with South African literature, with orality as a singularly rich characteristic of this country's literature, until recently neglected in literary histories. "The Khoi and San have so many stories to tell. We can benefit so much from rediscovering their wisdom and expertise."

## Faculty of Arts Creating tomorrow

omeone once said: "the arts flourish where there is a sense of adventure". And so it is at NMMU's Faculty of Arts with its diversity of postgraduate programmes within the broad fields of the humanities and social science. Art, architecture, applied language and anthropology are but the beginning of the academic adventure offered by this faculty.

The faculty has an excellent research and scholarly record in terms of DoE-accredited journal articles, books, book chapters, national and international research collaborations, supervision of postgraduate research, presentation of papers at national and international conferences and prestigious editorships.

Its strategic goal is the creation of an environment that is conducive to the development and maintenance of high quality research. The faculty also aims to increase postgraduate enrolments as well as the number of academic staff with doctoral qualifications.

The growth in postgraduate numbers has been accompanied by a growth in student research publications. Research capacity development is a strategic priority of the faculty and primarily involves the mentoring of emerging researchers in grant proposal writing, postgraduate research supervision and publishing skills.

### Faculty schools and departments

- School of Architecture Department of Architecture Department of Architectural Technology & Interior Design
- School of Music, Art and Design
   Department of Art and Design: Introductory Studies
   Department of Applied Design
   Department of Studio Arts
   Department of Music
- School of Language, Media and Culture
   Department of Applied Language Studies
   Department of Language and Literature
   Department of Journalism, Media Studies and Philosophy
   Department of Public Relations and Communication Studies
- School of Governmental and Social Sciences Department of Political and Governmental Studies Department of Sociology and Anthropology

#### **Research entities**

- Raymond Mhlaba Research Unit for Public Administration and Leadership
- Unit for the Study of Resolution of Conflict (USRC)

"The arts humanise the curriculum while affirming the interconnectedness of all forms of knowing. They are a powerful means to improve general education."

"We encourage the acquisition of a wide range of advanced professional knowledge and skills as well as a broad range of transferable skills such as critical analytical skills, ethics, teamwork and highly developed problemsolving abilities."

- Prof Velile Notshulwana, Faculty of Arts Dean

### Stay connected:

Faculty administration Tel: 041 504 4266 / 2855 / 2802 (honours, master's and doctoral programmes) Tel: 041 504 3153 / 3478 (MTech and DTech programmes)

Faculty website www.nmmu.ac.za/arts

General information Tel: 041 504 2162 E-mail: postgrad@nmmu.ac.za

- Charles Fowler, Arts educator and writer



"Architects use design to mould space and create place for people. Turning those visionary ideas into the built form is always exciting."

> – **Prof Gavin McLachlan,** Director: School of Architecture

## **School of Architecture**

The reputation of NMMU's architectural graduates speaks for itself in buildings designed by them around the globe. Postgraduate study opportunities abound in the fields of professional architecture, architectural computing and architectural technology. Research projects may also be undertaken on topics related to pertinent regional issues.

### High risers

Many successful architectural careers throughout South Africa and all over the world were kick-started at Nelson Mandela Metropolitan University's internationally-renowned School of Architecture, which has a reputation for producing high-calibre graduates. The School is also at the cutting edge of sustainable, "green" technology, integrating into its three programmes – Architecture, Architectural Technology and Interior Design – approaches to the Built Environment that can succeed in areas where resources like water and energy are under pressure. But while its influence is global, the School's roots are proudly African and it encourages its postgraduate students to seek unique design solutions that respond to the needs of the developing world.

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quanneation	Research	Coursework	Full-time	Part-time
MArch (Architecture) – Research	•		•	•
MArch (Professional Architecture)		•	•	
MArch (Architectural Computing)		•	•	•
MTech (Architectural Technology)	• and/or extended exhibition		•	•
DArch (Architecture)	•			



#### ADMISSION

Programme type	Requirements
MArch – Research	MArch (Professional) or permission granted by Senate
MArch (Professional)	Bachelor of Architectural Studies (BAS) or equivalent 60% pass in Design III
MArch (ArchComp)	MArch (Professional) or permission granted by Senate
DArch	MArch (Professional) with seven years' appropriate postgraduate practical experience or MArch (Research) or permission granted by Senate

Please consult the faculty officer or visit www.nmmu.ac.za/arts for additional requirements as stipulated by the department

### Stay connected:

Director: Prof Gavin McLachlan Tel: 041 504 4099 / 2719 E-mail: architecture@nmmu.ac.za Website: www.nmmu.ac.za/arts



"I believe that South Africa has the intellectual potential to be a competitor in innovation industries."

 Marcel Botha, Top NMMU 1995 MArch (Professional) graduate, who works at the frontier of digital design in America today and consults internationally



### Department of Architectural Technology හ Interior Design

Graduates have the opportunity to qualify on a postgraduate level from a department that is recognised for its high standards and for leading the field in architectural multimedia education.

The programme gives graduates experience in research techniques and methodologies applicable to their degree specialisation field. Prospective candidates must identify an appropriate problem in areas such as technology, construction materials, architectural practice, housing or sustainable development, and then research a solution.

MTech coursework options specialise in project management and property development or computers in architecture.

### **Stay connected:**

Department of Architectural Technology & Interior Design: Head of Department: Nicola Darke Tel: 041 504 3607 / 3517 / 9928 E-mail: nicola.darke@nmmu.ac.za

### **Department of Architecture**

For almost 40 years now, the Department of Architecture has produced valued professional architects whose work has changed and enhanced lives. Mentored by a dedicated and talented staff, the focus of the department is on design – turning visionary ideas into built form within the context of the site with a balanced input of all other skills necessary for this to take place – technical, professional and administrative. It is work that has won the department's students and graduates many awards, both nationally and internationally. The department also has a rich history of active research and publication.

#### OVERVIEW

### Professional architecture degrees

The professional architecture training consists of two degrees. The first degree is a three-year Bachelor of Architectural Studies degree (BAS) followed by the two-year Master of Architecture (Professional) degree.

Graduates, who have completed the MArch (Professional) degree and have complied with South African Council for the Architectural Profession's (SACAP's) practical training requirements, can register as a full professional architect. Both the BAS and MArch are fully accredited degrees.

The focus of the department is on the creative core discipline of design. In addition, the programme includes strong elements of architectural and urban theory and history; building technology, structure and services; law, management and professional practice; and architectural computer usage.

### Research focus

The Department of Architecture has a history of active research and publication, much of it related to pertinent regional issues. Research areas include the studies of:

- > Architectural conservation studies in the small towns and villages of the Eastern Cape.
- > Design, location and procurement of rural schools in the Eastern Cape.
- > Design of traditional courts for the Eastern Cape.
- > Coastal architecture and development, including marinas.
- Urban development issues, including housing.
- Space syntax.
- > Creativity with particular reference to architectural design.
- Architectural computer usage.

The department also offers a master's programme in Architectural Computing, spesialising in training in computer-based architectural presentation techniques, architectural documentation and IT strategies for architectural practice.

#### DID YOU KNOW?

 MArch (Professional) graduates are able to register as full professional architects after two years' of work experience.

#### DID YOU KNOW?

• Over the past 20 years, every student achieving their diploma or BTech (Architectural Technology) degree has found employment in their chosen fields of design, technology, computer applications or sustainable development in architecture.

### Stay connected:

Department of Architecture: Head of Department: Stephen Lear Tel: 041 504 2244 / 2719 E-mail: stephen.lear@nmmu.ac.za



"We pride ourselves in the fact that we engage with and support our postgraduate students on a oneon-one basis from day one. Nobody is merely a number."

> – **Mary Duker,** Director: School of Music, Art & Design

#### DID YOU KNOW?

- The School of Music, Art and Design has its roots in the country's oldest art school – the PE Art School founded in 1882.
- The winner of the prestigious national Sasol New Signatures in 2010 is an alumnus.
- The 2010 winner of the International Spinners and Dyer competition Laduma Ngxokolo, the second consecutive NMMU winner.
- In 2010 NMMU had eight finalists in the National Atelier competition.

### Stay connected:

Director: Mary Duker Tel: 041 504 3255 / 3256 E-mail: mary.duker@nmmu.ac.za

## School of Music, Art & Design

Creatively, commercially and intellectually our postgraduate students put their Cvisual stamp on the world. Individual tuition from highly-skilled and talented staff who are active practitioners in their respective fields, make NMMU the institution of choice when it comes to music, art and design.

Postgraduate study opportunities exist in the form of Master of Technology degrees in Applied Design and Fine Arts and master's and doctoral degrees in Music.

### **Departments of Applied Design and Studio Arts**

#### The Department of Applied Design specialises in:

• Graphic design, photography, fashion and textile design.

#### The Department of Studio Arts specialises in:

▶ Fine arts including drawing, painting, printmaking, sculpture, stained glass, ceramics, illustration, graphic design and photography.



"Studying has been an enriching experience for me. Many new windows and doors have been opened in my life."

- Bev de Lange, Businesswoman and mother, who recently completed her master's in visual arts.

#### PROGRAMMES

Qualification	Programme	structure	Study option	
Quanication	Research	Coursework	Full-time	Part-time
MTech (Ceramic Design)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•
MTech (Fashion)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•
MTech (Fine Art)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•
MTech (Graphic Design)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•
MTech (Multimedia)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•
MTech (Photography)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•
MTech (Textile Design හ Technology)	<ul> <li>Thesis only/ plus/or extended exhibition</li> </ul>		•	•

#### ADMISSION

Programme type	Requirements
MTech degrees	Relevant honours degree, professional four-year degree or BTech degree or RPL All submissions must be sanctioned by the Faculty of Arts Higher Degree Committee
Please consult the facul requirements as stipula	ty officer or visit www.nmmu.ac.za/arts for additional ted by the department

### Stay connected:

Department of Applied Design Head of Department: Mike Swanepoel Tel: 041 504 3317 E-mail: mike.swanepoel @nmmu.ac.za Department of Studio Arts Head of Department: David Jones Tel: 041 504 3494 E-mail: david.jones@nmmu.ac.za



#### PROGRAMMES

Qualification	Programm	ne structure	Study option		
Qualification	Research	Coursework	Full-time	Part-time	
Advanced Certificate in Education (Arts & Culture)*		•		•	
Advanced Diploma (Applied Choral Conducting) *	•	•	•	•	
MMus (Applied Choral Conducting)	•	•	•	•	
MMus (Composition)	•	•	•	•	
MMus (Music Education)	•	•	•	•	
MMus (Musicology)	•	•	•	•	
MMus (Music Technology)	•	•	•	•	
MMus (Performing Arts)	•	•	•	•	
DMus (Music)	•	•		•	
DPhil (Music)	•			•	

\* Although the advanced diplomas and certificates are not regarded as postgraduate qualifications per se, they have been included because of the relevance to the professional development of the mature student market.

### **Department of Music**

This department plays an active role in the hands-on tuition of its postgraduate students through its research and coursework programmes and links with the city's lively cultural scene. Its facilities are among the most modern in South Africa and include a well-equipped library, lecture halls, practice rooms, digital recording studios and three pipe organs.

Several coursework master's programmes have been tailor-made to meet the demands of today's music industry, and are structured to allow articulation possibilities with other universities and examining bodies like Unisa and the Royal School of Music. Another of its strengths is the variety of options it offers.

#### ADMISSION

Programme type	Requirements
Advanced Certificate	A recognised teachers' qualification
Advanced Diploma	Diploma in Music Education or equivalent on NQF level 6 Candidates without a music qualification must undertake an audition
Master's degrees	An honours or four-year professional bachelor's degree or equivalent as approved by Senate Required number of credits for specific modules as prescribed for each specialisation area (please consult the department)
Doctoral degrees	An appropriate master's degree in Music or equivalent as approved by Senate
Please consult the facult requirements as stipulat	y officer or visit www.nmmu.ac.za/arts for additional



"I have long held to Robert Browning's statement: 'There is no truer truth obtainable by man than comes of music'. "

- **Dr Rudi Bower,** Emerging Faculty Researcher of the Year 2010

#### DID YOU KNOW?

• Our music students perform around the world today.

"I believe music is one of the most profound forms of social discourse; disclosing the web of meaning that surrounds each musical composition is like reading the whole of a people's political, social and cultural history."

 Prof Zelda Potgieter, whose knowledge and research in critical musicology has attracted a large following of postgraduate students during her 23 years with NMMU.

### Stay connected:

Acting Head of Department: Prof Zoliswa Twani Tel: 041 504 2250 / 4096 E-mail: zoliswa.twani@nmmu.ac.za Website: music@nmmu.ac.za



"The effect good music has on the lives of so many people inspires me daily."

 Junita van Dijk, mentor for postgraduate choral conducting studies, who, along with the university choir she conducts, gives NMMU its "visual voice".

"Your lecturer and instrument is of the utmost importance and I had the privilege to study with the best piano teacher (Erika Bothma) in South Africa."

 Taryn Karg, postgraduate student, who is teaching music in the United Kingdom

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#### OVERVIEW Focus areas for coursework master's programmes include:

### **Choral Conducting**

This programme comprises block release tuition towards the presentation of three concert programmes, a course in research methodology and a mini-treatise in the field of choral music. *Note: The department also offers an Advanced Diploma in Choral Conducting which provides choral conductors with conducting techniques of international standard and an in-depth understanding and interpretation of choral repertoire through the ages.* 

### Composition

This programme involves presentation of an approved portfolio of compositions, as well as coursework in Advanced Tonal and Atonal Theory.

### **Music Education**

This programme consists of either a coursework component plus the writing of a treatise on a topic in music; or a coursework component plus creative output in the form of practical programmes plus a research component in the form of a treatise.

### Musicology

This programme involves a research component in the form of a treatise plus a coursework component wherein a choice is made between modules in Musicology or Advanced Tonal and Atonal Theory.

### Music Technology

Candidates wishing to specialise in music education may follow one of two curriculum. The first is a research-based curricula that includes a dissertation in addition to coursework in music education and research methodology. The second focuses on the generic skills of educators and involves musical performance, a treatise, as well as coursework in music education and research methodology.

### Performing Arts

This programme involves the presentation of three concert programmes, the writing of a treatise in performance practice, a course in research methodology, as well as additional coursework where a choice is made between Musicology and Advanced Tonal and Atonal Theory.

Doctoral studies involve either a full research project in the form of a thesis (DPhil); or submission of an approved portfolio of compositions or the submission of a thesis together with an approved portfolio of original contributions in the field of performance practice (DMus).

## School of Language, Media and Culture

This school offers a wide range of study and research opportunities in fields such as applied linguistics, language and literature, applied media, journalism, philosophy, public relations management and communication science.

#### THE SCHOOL'S DEPARTMENTS

- Department of Applied Language Studies
- Department of Language and Literature
- > Department of Journalism, Media Studies and Philosophy
- > Department of Public Relations and Communication Studies

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quaincation	Research	Coursework	Full-time	Part-time
Bachelor Honours degrees				
BAHons (Afrikaans හ Dutch)		•	•	
BAHons (Applied Language Studies)		•	•	
BAHons (English Studies)		•	•	•
BAHons (Corporate Communication)		•	•	•
BAHons (Journalism)		•	•	•
BAHons (Media Studies)		•	•	•
BAHons (French)		•	•	•
BAHons (isiXhosa)		•	•	•
BAHons (Philosophy)		•	•	
Master's degrees				
MA (Afrikaans & Dutch Literature)	•		•	•
MA (African Languages)		•	•	•
MA (Applied Language Studies)	•	•	•	•
MA (English Studies)	•		•	•
MA (French)	•		•	•
MA (isiXhosa)	•		•	•
MA (Media Studies)	•	•	•	•
MPhil (Philosophy)	•		•	•
MTech (Public Relations Management)	•		•	•



Qualification	Programm	ne structure	Study option	
Qualification	Research	Coursework	Full-time	Part-time
Doctoral degrees				
DLitt (Afrikaans & Dutch) – Literature/ Linguistics	•			
DLitt (Applied Languages)	•			
DLitt (English Studies)	•			
DLitt (French)	•			
DLitt (isiXhosa) - Literature/Linguistics	•			
DPhil (Afrikaans Linguistics)	•			
DPhil (English Linguistics)	•			
DPhil (Media Studies)	•			
DPhil (Philosophy)	•			

#### ADMISSION

Programme type	Requirements	
Honours degrees	A relevant bachelor's degree or equivalent approved by Senate	
Master's degrees	A relevant bachelor's honours degree or equivalent approved by Senate	
Doctoral degrees	A relevant master's degree or equivalent approved by Senate	
Please consult the faculty officer or visit www.nmmu.ac.za/arts for additional requirements as stipulated by the department		

### OVERVIEW Applied Language Studies

Study and research opportunities are offered in the field of general linguistics (i.e. non-language-specific) coupled with Applied Linguistics as a recognised discipline. The focus is on applications such as translation, language teaching, lexicography, language planning, sociolinguistics and text linguistics which also constitute the contents of various streams in its postgraduate coursework programme.

### Language and Literature

Postgraduate programmes are offered in four subject groups: Afrikaans and Dutch; English; French (including classical culture) and isiXhosa.

**Afrikaans & Dutch:** Honours studies focus on a wide range of areas in literature and linguistics. Literature studies focus on Afrikaans poetry and prose, Dutch poetry and prose, South African drama, theory of literature, comparative literature, oral tradition, and children's literature. The linguistic focus is on variation linguistics, semantics, lexicography and pragmatics. Master's and doctoral research projects may be undertaken on topics approved by the department. Opportunities for overseas study, bursaries and scholarships are available.

#### Connect to: Prof Helize van Vuuren Tel: 041 504 2223 • E-mail: helize.vanvuuren@nmmu.ac.za

**English:** The honours programme focuses on the study of contemporary comparative literature, postmodernism and textuality, gender and writing, and African literature. Master's and doctoral research projects may be undertaken on topics approved by the department.

#### Connect to: Dr Neville Smith

Tel: 041 504 2222 • E-mail: neville.smith@nmmu.ac.za

**French:** Studying French at postgraduate level will open up the possibilities at an international level. The French Embassy offers linguistic bursaries to senior students, either to Réunion Island for two weeks or to France for eight months. Honours studies focus on French linguistics, theory of literature, Old French and the literature of the Middle Ages, 16th century literature, 20th century literature, and African literature in French.

#### Connect to: Dr Hilda Thomas

Tel: 041 504 2245 • E-mail: hilda.thomas@nmmu.ac.za

**isiXhosa:** Honours students select a range of literature and linguistic modules in consultation with the programme leader while master's and doctoral studies consists of a full research project on a topic approved by the department.

Connect to: Prof Bench Mkonto Tel: 041 504 1280 • E-mail: bench.mkonto@nmmu.ac.za



"Our postgraduate students benefit from a programme that actively promotes peer group support in the form of regular seminars of staff and student work-in-progress."

- Mary West, senior lecturer: English

### **Stay connected:**

School of Language, Media & Culture Acting Director: Prof Dr Linda Kwatsha Tel: 041 504 1166 E-mail: linda.kwatsha@nmmu.ac.za



"A postgraduate qualification is the 'finishing school' of your training – you are transformed from merely a trained person into an expert in your field. When you advise, management listens!"

- **Beulah van Rooyen,** lecturer in public relations, who has worked at NMMU for 25 years

### Stay connected:

Head of Department: Hercules Fourie Tel: 041 504 3330 E-mail: hercules.fourie@nmmu.ac.za

### Department of Journalism, Media Studies and Philosophy

Research opportunities are offered in the fields of journalism, media studies and philosophy.

### **Media Studies**

The purpose of the media programme is, by way of intellectual orientation, practical training and re-skilling, to produce well-rounded candidates who can cope with the multi-faceted demands of an increasingly diversified media and publishing environment. Research may be undertaken on master's and doctoral level in the fields of cultural, film, television and communication studies as well as journalism and new media.

Connect to: Bianca Wright Tel: 041 504 2225 • E-mail: bianca.wright@nmmu.ac.za

### Philosophy

The honours programme in Philosophy focuses on an in-depth study in areas such as philosophical anthropology, philosophy of language, contemporary philosophy, and social and political philosophy. Research may be undertaken on master's and doctoral level.

Connect to: Prof Bert Olivier Tel: 041 504 2218 • E-mail: bert.olivier@nmmu.ac.za

### Department of Public Relations and Communication Studies

South Africa is recognised as the first country to research and evolve a body of knowledge on public relations. In today's information-saturated world, the role of this sophisticated, multi-faceted discipline becomes even more important.

The department offers postgraduate study and research opportunities in the broad fields of public relations management and communication science.



"Any student who does not emerge from a course in philosophy a changed person, has not learned anything."

- Bert Olivier, Professor of Philosophy

### Promoting philosophy

Prof Olivier has held postdoctoral fellowships in philosophy at Yale University in the United States on more than one occasion, and has held a research fellowship at the University of Wales, Cardiff.

This outspoken commentator on life (his opinions are published regularly in Mail & Guardian) teaches various sub-disciplines of philosophy, as well as film studies, media and architectural theory, and psychoanalytic theory.

He has published widely in the philosophy of culture, art and architecture, cinema, music and literature, as well as the philosophy of science, epistemology, psychoanalytic, social, media and discourse theory.

He has received innumerable awards including the Stals Prize for Philosophy by the South African Academy for Arts and Sciences and has been NMMU's Researcher of the Year several times.

# School of Governmental and Social Sciences

#### DEPARTMENTS AND UNITS

- Department of Political and Governmental Studies
- Department of Sociology and Anthropology
- > The Raymond Mhlaba Research Unit for Public Administration and Leadership
- > The Unit for the Study and Resolution of Conflict (USRC)

**The Department of Political and Governmental Studies** offers a wide range of study and research opportunities in the fields of political science, conflict transformation and management, South African politics and political economy, public administration and public management.

Connect to: Prof Sebenzile Masango

Tel: 041 504 2035/1139 • E-mail: rs.masango@nmmu.ac.za

**The Department of Sociology and Anthropology** focuses on study and research opportunities in the fields of anthropology, sociology, group dynamics, history, and Christian studies. Besides involving students in an international cross-cultural research network, students receive cutting-edge business process training using SAP, the world's leading enterprise resource planning (ERP) system.

#### **Connect to: Prof Frans Bezuidenhout**

Tel: 041 504 4083/2146 • E-mail: frans.bezuidenhout@nmmu.ac.za

#### The Raymond Mhlaba Research Unit for Public Administration and Leadership

provides research and consultancy services to the public and private sectors, as well as research opportunities in public administration and management.

**Connect to: Prof Sebenzile Masango** 

Tel: 041 504 2035/1139 • E-mail: rs.masango@nmmu.ac.za

The Unit for the Study and Resolution of Conflict (USRC) aims to contribute to the study of conflict, conflict processes, and conflict resolution and management techniques. USRC has a wealth of expertise and a credible track record in conflict management processes regionally and nationally. It provides exciting study and research opportunities designed to benefit civil servants, middle and top-level management, community leaders, development specialists, Foreign Service personnel, social workers and role players in the educational environment.

**Connect to: Gavin Bradshaw** 

Tel: 041 504 2913 • E-mail: gavin.bradshaw@nmmu.ac.za

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quanneation	Research	Coursework	Full-time	Part-time
Honours degrees				
BA Hons (Anthropology)		•	•	•
BA Hons (Group Dynamics)		•	•	•
BA Hons (History)		•	•	•
BA Hons (Political Science)		•	•	•
BA Hons( Public Administration & Management)		•	•	•
BA Hons (Sociology)		•	•	•
Master's degrees				
MA (Anthropology) — research	•		•	•
MA (Anthropology) – coursework		•	•	
MA (Conflict Transformation & Management)	•	•	•	•
MA (History)	•		•	•
MA (Sociology) – General or Group Dynamics	•	•	•	•
MA (Political Science)	•		•	•
MA (Public Administration)	•		•	•
MPhil (Public Administration)		•	•	•
MPhil (South African Politics & Political Economy)	•	•	•	•
MPA (Public Administration)		•	•	•
Doctoral degrees				
DPhil (Anthropology)	•		•	•
DPhil (Biblical & Religion Studies)	•		•	•
DPhil (Conflict Transformation හ Management)	•		•	•
DPhil (History)	•		•	•
DPhil (Political Studies)	•		•	•
DPhil (Public Administration)	•		•	•
DPhil (Sociology)	•		•	•

See admission requirements overleaf



"Postgraduate programmes within the School of Governmental and Social Sciences enable an understanding of the social world to develop strategies, effect change and formulate policies which provide, enhance and maintain an improved quality of life."

 Prof Kishore Raga, Director of School of Governmental and Social Sciences

### Stay connected:

Director: Prof Kishore Raga Tel: 041 504 3711 E-mail: kishore.raga@nmmu.ac.za Website: www.nmmu.ac.za/arts



"Teaching students about the intricate dynamics of groups and teams within a variety of social contexts, excites me more than anything. The realisation that I can affect group behaviour and that I can be affected by the group, is mind boggling. This acts as a motivation to learn and experience more, and to share this with my students."

- **Prof Frans Bezuidenhout**, Group Dynamics Postgraduate Programme leader

#### DID YOU KNOW?

 80 % of candidates completing postgraduate qualifications in the Conflict Transformation and Management programme are mid-career professionals.

#### OVERVIEW

### Anthropology

Study opportunities equip graduates with a solid knowledge base and understanding of cultural, social and related issues in Africa, and in South Africa in particular. In the context of increasing globalisation, an understanding of different cultures and the skills to manage diversity are highly valued.

Connect to: Prof Henk Pauw Tel: 041 504 2188 • E-mail: henk.pauw@nmmu.ac.za

### **Conflict Transformation and Management**

This postgraduate programme is the only one in its field in South Africa and indeed, Africa, and aims to remain a world-class international educational leader in conflict and peace studies. Study opportunities have been especially developed to benefit civil servants, middle and top-level management, community leaders, development specialists, Foreign Service personnel, social work practitioners, teachers and school administrators, police officers and all those who manage conflict as part of their daily routine. Apart from research projects on master's and doctoral level, students may also follow a coursework master's programme.

Connect to: Dr Lyn Snodgrass Tel: 041 504 2624 • E-mail: lyn.snodgrass@nmmu.ac.za

#### History

Themes from the history of Africa and from 20th century world history, as well as sociological theory and methodology, and Historiography/Philosophy of History are studied on honours level. A focus research area is post-apartheid South Africa. Research may be undertaken on master's and doctoral level.

Connect to: Dr Otto Terblanche Tel: 041 504 2212 • E-mail:otto.terblanche@nmmu.ac.za

### **Political Science**

The honours programme exposes students to political philosophy and dynamics, trends in South African and African politics, conflict and conflict processes and international relations and world politics. Apart from research at master's and doctoral level, there is a master's coursework programme focusing on South African politics and political economy. It offers mid-career advancement opportunities for a range of professionals, and will equip new entrants for careers in government, the public sector, civil society, NGOs, business and research arenas.

Connect to: Danielle Barnes Tel: 041 504 2179 • E-mail: danielle.barnes@nmmu.ac.za



"I realise that I do what I do because of the students. They want to make a difference in their chosen professions and have a belief that they can. This inspires me."

 Dr lyn Snodgrass, who runs the Conflict Transformation and Management master's programme, the only postgraduate programme of its kind in South Africa and Africa.

#### ADMISSION

Programme type	Requirements	
Honours degrees	A relevant bachelor's degree or equivalent approved by Senate	
Master's degrees	A relevant bachelor's honours degree or equivalent approved by Senate. Some coursework programmes only require a bachelor's degree. NMMU also allows students to register based on recognised prior learning (RPL).	
Doctoral degrees	A relevant master's degree or equivalent approved by Senate	
Please consult the faculty officer or visit www.nmmu.ac.za/arts for additional requirements as stipulated by the department		



### Public Administration & Management

Various postgraduate options are offered to suit the needs of professionals in this field. The honours programme equips students with advanced training in areas such as administrative theories, financial administration and management, personnel administration, municipal and provincial administration and applied conflict management. Postgraduates may proceed with pure research on master's and doctoral level or enrol for the MPA degree, which is professionally designed to enhance the knowledge and skills of public managers. The MPhil is for candidates who wish to continue with postgraduate studies in Public Administration, but who do not qualify for admission to the MPA programme due to a lack of adequate administrative experience.

Connect to: Prof Sebenzile Masango or Loyiso Topu Tel: 041 504 2035/2263 • E-mail: rs.masango@nmmu.ac.za or loyiso.topu@nmmu.ac.za

### Sociology

The honours programme focuses on economic sociology, and socio-cultural studies such as in the management of cultural diversity, education, and research. The degree also accommodates the fields of applied sociology and the sociology of practice. The master's programmes offer in-depth grounding in the fields of economic sociology, cultural diversity management, social research and HIV/Aids. Candidates have a unique opportunity to be exposed to an enterprise resource planning system, and do electronic human resource management related research. Students may also proceed with research on doctoral level.

Connect to: Prof Peter Cunningham Tel: 041 504 2175/2146 • E-mail: peter.cunningham@nmmu.ac.za

### Sociology (Group Dynamics)

NMMU is the only university in South Africa offering postgraduate degree programmes in this field. The programmes are accredited by the SA Board of Counsellors for nontherapeutic intervention. Programmes provide students with a sound knowledge base and practical skills to effectively deal with the dynamic characteristics of groups/ teams. While this coursework programme enables research of various group-related endeavours, through experiential learning, students also acquire the opportunity for competence enhancement and skills training.

Connect to: Prof Frans Bezuidenhout

Tel: 041 504 2175/2146 • E-mail: frans.bezuidenhout@nmmu.ac.za



"The rewarding side of doing postgraduate studies is knowing that many past students have had their work published in national and international publications."

 Prof Peter Cunningham, Sociology lecturer, who is the only SAP-credited academic in the fields of human resource management and Data Warehouse

"I must say that throughout my work I am using all the skills acquired through the Conflict Transformation and Management programme at NMMU."

 Victor Shale, former student, who works in Sudan for EISA, a body that promotes credible elections and democratic governance in Africa.

### Managing tomorrow



## Giving family business the edge

BUSINESS Management's **Professor Elmarie Venter** is one of the country's leading experts on family businesses.

Prof Venter, who completed her doctorate on family business succession (handing the business over to the next generation) in 2003, is vice-president of the Family Business Association of Southern Africa (Fabasa) and co-director of the Family Business Unit at Nelson Mandela Metropolitan University.

This 2010 Faculty of Business and Economic Sciences Researcher of the Year is also president of the South African Institute for Management Scientists (Saims), a position which sees her working with representatives from business management departments at all South African universities to improve business management education and research. But it is family businesses that are her true passion. "NMMU's Family Business Unit is at the forefront of family business research in South Africa – it is the first unit of its kind to be established by a South African university." It also boasts the largest grouping of family business researchers in the country, with all four founding members – Prof Venter, Dr Margie Cullen, Dr Chris Adendorff and Dr Shelley Farrington – holding doctoral degrees in family businesses.

A growing number of masters and doctoral students are conducting research in the field of family businesses, exploring such issues as the role of non-family employees in family businesses, and how to preserve family harmony within family businesses.

Prof Venter's research has been recognised at home and abroad. A paper she penned with her colleagues on copreneurship – where husbands and wives work together – took top honours at conferences at Saims and in Cyprus in 2009. In 2010, she again snapped up the Saims Best Paper Award for a paper she and Dr Farrington wrote on sibling partnerships.

## **Faculty of Business and Economic Sciences**

Managing tomorrow

he comprehensive nature of the Faculty of Business and Economic Sciences offers a dual focus – traditional university education and practical, world-of-work tuition associated with universities of technology.

"We believe the effective integration of these two not only adds value to the broader community, but adds a differentiating value to our graduates," says Prof Niekie Dorfling, dean of the Faculty of Business and Economic Sciences.

Furthermore, the faculty's emphasis on responding to the needs of the community and contributing towards sustainable development within the local community and broader African context, ensures that this faculty is managing tomorrow ethically.

The faculty, with its five schools, offers a comprehensive set of programmes including the highly-acclaimed BCom Honours programme in Chartered Accounting and a fully-accredited MBA.

The faculty also houses various research entities contributing to the establishment and growth of research in an ever-changing environment. These entities also contribute to the needs of the community locally and regionally through sustainable business development programmes and services, the provision of entrepreneurship training, and advisory and information services to the business sector.

In order to optimise synergies, fast-track development and obtain maximum use from its research resources, the faculty has identified a number of research focus areas.

### Research focus areas

- Labour relations
- Small and family businesses
- Lean manufacturing
- Automotive industry
- Environmental economics
- Professional ethics and governance
- African management
- Local economic development

### Faculty schools, departments and research entities

School of Accounting
 Department of Financial Accounting
 Department of Auditing and Taxation
 Department of Management Accounting
 Department of Applied Accounting

 School of Economics, Development and Tourism Department of Economics
 Department of Development Studies
 Department of Tourism
 Tourism Research Unit

- ► School of Industrial Psychology and Human Resources Department of Human Resources Management Department of Industrial & Organisational Psychology Labour Relations & Human Resources Unit
- School of Management Sciences
   Department of Business Management
   Department of Logistics
   Department of Management & Entrepreneurship
   Department of Marketing Management
   Unit for Applied Management Sciences
- NMMU Business School The Graduate School of Business The leadership Academy Graduate School Family Business



"Our programmes are structured to provide students with clear and logical learning pathways for progression from undergraduate studies to the highest academic level, namely doctors degree."

- **Prof Niekie Dorfling,** Faculty of Business and Economic Sciences dean

### Stay connected:

#### Faculty administration Tel: 041 504 3741/3802 (for MTech and DTech enquiries) Tel: 041 504 2248/2120 (for honours, master's and doctoral enquiries)

Faculty website www.nmmu.ac.za/business

General information Tel: 041 504 2162 postgrad@nmmu.ac.za

*"Identified as one of the fastest-growing areas in South Africa, Nelson Mandela Bay is awash with investment opportunities like the multi-million rand Coega project with its deep-water harbour and industrial development zone."* 



"My research focuses on the development of the behavioural skills of aspirant internal auditors. This is important as internal auditors are expected to play an increasingly significant role as corporate governance partners."

 – Mr Houdini Fourie, Emerging Researcher of the Year 2010

### Stay connected:

Director: Prof Frans Prinsloo Tel: 041 504 2874 E-mail: bashlique.hayes@nmmu.ac.za Website: www.nmmu.ac.za/accounting

## **School of Accounting**

The School of Accounting, by means of its highly qualified experienced and committed academic staff, aims to make a significant contribution to the education of professional accountants and those who wish to make a meaningful contribution to financial reporting, control and management in the private and public sectors.

This school is widely recognised as a leader in the education of prospective chartered accountants in South Africa through its flagship BCom Honours (Accounting) programme. High quality research and coursework programmes are offered in the fields of accounting, auditing, management accounting and taxation.

#### PROGRAMMES

Qualification	Programm	e structure	Study option	
Quanneation	Research	Coursework	Full-time	Part-time
BComHons (Accounting)		•	•	
MCom (Accounting)				•
MCom (Taxation)			•	•
MTech (Cost හ Management Accounting)		•	•	•
DCom/PhD (Accounting)	•		•	•

### The Thuthuka Project

The Thuthuka project of South African Institute of Chartered Accountants (SAICA) is a multifaceted project aimed at redressing the racial imbalances in the chartered accounting profession. One initiative is the funding of about 200 black and coloured South African students to attend NMMU full time for up to five years to complete the academic requirements for the chartered accounting qualification.

One of the areas the NMMU Chartered Accountancy (CA) programme was commended for in the SAICA-accreditation report of November 2009 was "... a well run Thuthuka programme which is achieving excellent throughputs".

The NMMU CA programme was awarded the highest rating available in terms of the programme satisfying the SAICA-accreditation criteria, and the School of Accounting was complimented for the quality of its academics, teaching approach and management team.



#### ADMISSION

Programme type	Requirements
BComHons (Accounting)	BCom (Accounting for Chartered Accountants) or BCom (Rationum) or an equivalent bachelor's degree approved by Senate Candidates must comply with the following pre-requisites for the particular modules: <b>Accounting IV (R400):</b> A pass mark in Accounting III (R301) [for General Accounting III (RG01)] and a mark of at least 55% for Accounting III (RG02) <b>Taxation IV (RIT400)</b> A pass mark in Taxation III (RT301) [or General Taxation III (RG1301)] and a mark of at least 55% for Taxation III (RT302) <b>Auditing IV (R0400)</b> A pass mark in Auditing III (R0301) or General Auditing 3 (RG0301)] and a mark of at least 55% for Taxation III (RT302) <b>Management Accounting III</b> (RK301) and (RK302) All these marks must be attained in the two years preceding the year of registration for the BComHons (Accounting) For admission to the Qualifying Examination Part 1 of the South African Institute of Chartered Accountants, a student must pass R400, R0400, RK400 and RIT 400 in the same year
MCom (Accounting)	BCom Honours (Accounting) degree in a related field or equivalent qualification approved by Senate.
MCom (Taxation)	BCom Honours (Accounting) degree or equivalent qualification Practical and other experience and qualifications sufficient to demonstrate to Senate a level of competence adequate for postgraduate Taxation studies
MTech (Cost & Management Accounting)	BTech (Cost ${\mathfrak S}$ Management Accounting) or equivalent as approved by Senate
DCom/PhD (Accounting)	MCom (Accounting) or equivalent as approved by Senate
	aculty officer or visit www.nmmu.ac.za/accounting for additional pulated by the school



#### PROGRAMMES

Qualification	Programm	ne structure	Study	option
Quanneation	Research	Coursework	Full-time	Part-time
Bachelor Honours degrees				
BComHons (Tourism)		•	•	•
BComHons/BAHons (Economics)		•	٠	•
Master's degrees				
MCom/MA (Economics)	•		•	•
MA (Development Studies)	•	•	٠	•
Doctoral degrees				
DCom/PhD (Economics)	•		•	•
DPhil (Development Studies)	•		•	•

#### **ADMISSION**

Programme type	Requirements				
Honours degrees	A relevant bachelor's degree or equivalent approved by Senate				
Master's degrees	A relevant bachelor's honours degree or equivalent approved				
	by Senate				
Doctoral degrees	A relevant master's degree or equivalent approved by Senate				
	Please consult the faculty officer or visit www.nmmu.ac.za/business for additional requirements as stipulated by the department				

## School of Economics, Development and Tourism

The School of Economics, Development and Tourism comprising the departments of Economics, Development Studies and Tourism Management, offers a wide range of postgraduate study and research opportunities varying from in-depth analysis of economic aspects of modern society, to tourism research, to programmes in development studies. It also houses units that contribute to economic growth in the region.

The school has developed a strong network of research associates and visiting scholars thanks to its highly competent staff and commitment in applying itself to real world business challenges.

Growing South Africa's tourism market is among those challenges. NMMU understands tourism's importance to the economy in terms of employment and foreign revenue and as such, has developed programmes and research areas to meet these aspirations.

### **Research areas**

- Globalisation
- Maritime development
- Diversity and identity
- Poverty alleviation
- Social capital
- Human security
- Peace and development
- Counter-trade and industrial development
- ▶ HIV/Aids and cross-cultural management
- Tourism heritage studies
- ▶ Tourism positioning and relationship marketing
- Tourism value perceptions



"We want to guide our students on a journey to think, live and experience what nobody else has, and in doing so, to make a meaningful and dedicated contribution to building a better and brighter future for all in our economy."

- **Prof Hendrik Lloyd**, director of the School for Economics, Development and Tourism

## Stay connected:

Director: Prof Hendrik Lloyd Tel: 041 504 2626 / 2906 E-mail: hendrik.lloyd@nmmu.ac.za / deirdre.erasmus@nmmu.ac.za Website: www.nmmu.ac.za/business

#### Economics

Head of Department: Prof Pierre le Roux Tel: 041 504 2638/2205 E-mail: stephen.hosking@nmmu.ac.za / deidre.erasmus@nmmu.ac.za



"Tourism is alive and dynamic. Everyday, every experience represents an exciting adventure both for the tourism practitioner and tourist."

- Hugh Bartis, Head of Department, Tourism

## Stay connected:

Development Studies Head of Department: Prof Richard Haines Tel: 041 504 2729/2504 E-mail: richard.haines@nmmu.ac.za / candice.bezuidenhout@nmmu.ac.za

#### Tourism

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Head of Department: Hugh Bartis Tel: 041 504 3766/3714 E-mail: hugh.bartis@nmmu.ac.za / candice.bezuidenhout@nmmu.ac.za

## **Tourism Research Unit**

The Tourism Research Unit (TRU) is a specialist unit within the Department of Tourism which has forged partnerships with acknowledged experts in their various fields and leading universities worldwide, as well as tourism industry stakeholders. The TRU undertakes contractual tourism work in the fields of research, statistical analysis, feasibility studies, business plans, sector plans, master plans, development plans, marketing plans, potential assessment, investment projects and training programmes.

#### Connect to: Hugh Bartis

Tel: 041 504 3766 • E-mail: hughbartis@nmmu.ac.za



## Environmental economics

**Prof Stephen Hosking** (above) is a respected economist whose expertise in natural resource and environmental economics is widely acknowledged – and is regularly quoted by the media. His specialisation in water use related research has attracted a team of postgraduates from many African countries including Uganda, Kenya, Botswana and Zambia.

He believes his foremost mission is to improve the standard of economics teaching and supervision at NMMU. He pursues this goal by being the link between teaching and research, and through interaction with government, business and the community.

By 2011, Prof Hosking had notched up 26 years of university teaching experience, published 38 papers in recognised scientific journals, 38 reports and papers in other books and journals and presented 36 papers at various conferences around the world. He has supervised 21 master's students and one doctoral student.

"Prof Hosking is a patient mentor. He does not just merely show interest in the well-being of his students but goes out of his way to give them various opportunities. His open-door management style makes him so approachable."

- Johanne Dikgang, postgraduate student

#### DID YOU KNOW?

- NMMU master's graduate **George Dimopoulos** won the Council of the Economic Society of South Africa's Founders Medal in 2006 for the best Economics Master's dissertation submitted of all the universities in South Africa in 2005. His dissertation examined the value of the fresh water estuaries in the Southern Cape.
- Shark diversity and varied marine environments along the coast of southern Africa provide unparalleled opportunities for marine ecotourism. Enormous opportunities for development of non-exploitative use of shark resources, particularly through diving, exist in the waters off the Eastern Cape. NMMU and Bayworld Oceanarium are working together to explore this business potential while educating folk about the ecologically sensitive nature of marine ecosystems.
- The Department of Development Studies is assisting the Department of Environmental Affairs and Tourism (DEAT) with a community-oriented social responsibility project in the Swartkops Estuary aimed at developing a fish farm that will produce fresh water crayfish and koi.

## School of Industrial Psychology and Human Resources

This school with its departments of Industrial and Organisational Psychology and Human Resources Management, offers various research and postgraduate study opportunities relevant to the fields of human resources, labour relations, and industrial and organisational psychology.

#### PROGRAMMES

Qualification	Programm	e structure	Study	option
Quanneation	Research	Coursework	Full-time	Part-time
Bachelor Honours degrees				
BComHons/BAHons (Industrial හ Organisational Psychology)		•	٠	•
BComHons/BAHons (Labour Relations හ Human Resources)		•	•	•
Master's degrees				
MCom/MA (Industrial Psychology)	•		•	•
MCom/MA (Labour Relations හ Human Resources)	•	•	٠	•
MTech (Human Resources Management)	•		•	•
Doctoral degrees				
DCom/PhD (Industrial හ Organisational Psychology)	•		٠	•
DCom/PhD (Labour Relations හ Human Resources)	•		•	•
DTech (Human Resources Management)	٠		٠	•

#### ADMISSION

Programme type	Requirements			
Honours degrees	A relevant bachelor's degree or equivalent approved by Senate Candidates must comply with the pre-requisites for the particular modules as described by the faculty			
Master's degrees	A relevant honours degree or equivalent approved by Senate			
Doctoral degrees	A relevant master's degree or equivalent approved by Senate			
Please consult the faculty officer or visit www.nmmu.ac.za/business for additional requirements as stipulated by the department				



## Understanding the workplace

"We are the balm to the wounds of work," says **Prof Rob Snelgar** (above) of the discipline of Industrial and Organisational Psychology which focuses on the controlling of people behaviour and systems within the workplace. With 30 years' experience in the field, Prof Snelgar well knows the realities of the South African workplace, and it isn't one that can be simply reduced to a set of equations or principles.

"Today's workplace is technological and multicultural. There's greater diversity in demographic characteristics, interests, and styles than in past decades. Mergers, acquisitions, downsizing and outsourcing have all made the idea of 'life-long employment' at one company an elusive dream."

Prof Snelgar has supervised some 270 postgraduate students, who are highly regarded practitioners in industry.

## Unit for Labour Relations & Human Resources

Apart from offering well-established progammes, the Labour Relations & Human Resources Unit conducts research on critical issues such as the transformation of work, absenteeism and labour turnover, strikes and stay-aways and conflict resolution. A current research project, for example, is the organisational impact of HIV/Aids.

Certificate programmes for trade unions and management are also presented. The unit has a long and constructive history of community service in meeting real needs in the workplace.

**Connect to: Razaanah Meyer** 

Tel: 041 5042363 • E-mail: razaanah.meyer@nmmu.ac.za

"It's critical for organisations to stay abreast of developments and be involved in research activities. The success of this research is very much dependent on having staff who are skilled in conducting research, interpreting findings and making appropriate recommendations."

 Prof David Berry, director of the School of Industrial Psycology and Human Resources

### Stay connected:

Director: Prof David Berry Tel: 041 504 3831 E-mail: david.berry@nmmu.ac.za

Industrial & Organisational Psychology Head of Department: Prof Rob Snelgar Tel: 041 504 2364 E-mail: razanaah.meyer@nmmu.ac.za

Human Resources Management Head of Department: Dr Michelle Mey Tel: 041 504 3824 E-mail: michelle.mey@nmmu.ac.za



"It's rewarding to see the positive results when service firms actually implement suggested business strategies."

> – **Prof Madéle Tait**, Head of Department, Marketing

## Stay connected:

Director: Prof Miemie Struwig Tel: 041 504 2475 E-mail: miemie.struwig@nmmu.ac.za Website: www.nmmu.ac.za/business

## School of Management Sciences

This school's wide range of postgraduate study and research opportunities contributes to the development of excellence in the business world.

Programme areas include business management, financial management, investment management, entrepreneurship, logistics, management economics, marketing management, small business management and strategic management. They can be found in the following departments:

- ▶ Department of Business Management
- ▶ Department of Logistics
- Department of Management and Entrepreneurship
- Department of Marketing Management
- Unit for Applied Management Sciences



## **Unit for Applied Management Sciences**

The Unit for Applied Management Sciences (UAMS) represents the research pillar of the School of Management Sciences. UAMS aims to establish, maintain and grow a creative research culture by providing research opportunities in the fields of business management, entrepreneurship, business development, logistics and supply chain management and marketing management. The unit also offers short courses, consulting and training services, and assistance with the establishment of small business enterprises.

#### Connect to: Prof Elroy Smith Tel: 041 504 2033 • E-mail: elroy.smith@nmmu.ac.za

#### ADMISSION

Programme type	Requirements		
Honours degrees	A relevant bachelor's degree with a minimum of 60% for Business Management III or equivalent qualification approved by Senate		
Postgraduate diploma	A relevant bachelor's degree at NQF level 6 or a relevant NQF level 8 qualification. Approval from the Dean should approporiate prior learning and experience be demonstrated by the applicant.		
Master's degrees	A relevant bachelor's honours degree (for MA/MCom programmes) or BTech (for MTech programmes) or equivalent approved by Senate		
Doctoral degrees	A relevant master's degree or equivalent approved by Senate		
Please consult the faculty officer or visit www.nmmu.ac.za/business for additional requirements as stipulated by the Department			

#### PROGRAMMES

Qualification	Programm	ne structure	Study	option
Qualification	Research	Coursework	Full-time	Part-time
Bachelor Honours degrees				
BComHons (Business Management)		•	•	•
Postgraduate Diploma				
PG (Financial Planning)		•	• (Block release)	• (Block release)
Master's degrees				
MCom (Business Management)	•		•	•
MTech (Business Administration)	•		•	•
MTech (Entrepreneurship)	•	•	٠	٠
MTech (Logistics)			•	•
MTech (Marketing)	•		٠	•
Doctoral degrees				
DCom/PhD (Business Management)	•		٠	•
DTech (Logistics)	•		٠	•
DTech (Marketing)	•		•	•



## **Department of Logistics**

The main research areas of this department are:

- Customer Relations Management
- Entrepreneurship and Small Business Management
- Family businesses
- Logistics
- Marketing Management (Online)
- Research Management
- Strategic Management



## Game for business

"Anyone can be successful if you believe in yourself," says **Prof Miemie Struwig**, Director of the School of Management Sciences.

And Prof Struwig, who has lectured at the university for 27 years and has a PhD in Business Economics, will be there to nurture you to your full potential. "This is my true passion – helping others."

Prof Struwig is nationally and internationally recognised for her expertise in business research. She is multi-skilled and worked across most of the specialisations in the field of Business Management. Prof Struwig also has the knowledge to complement her compulsion to assist students with, among others, their research methodology problems. Though she helps students in a range of business-related topics, her areas of expertise are entrepreneurship and personal finance. For the past two years she has also researched social networking and customer review platforms.

One of her books, *Planning, Designing and Reporting Research (2001)*, focusing on methods of research for writing proposals, was written as a direct result of her experiences with struggling postgraduate students.

She's also an advocate of hands-on tuition. "The more you practice, the better you learn. I love to see students overcome their problem areas and reach new heights."

She is a member of the of Academic Board for the Journal of Contemporary Economics, Poland, Europe and member of the Scientific Board of the International Forum, (2010-2011) From Science to Business, St Petersburg, Russia. She has acted as Reviewer of International Conferences in Europe and the East. "My research contributes to the rather limited body of knowledge on venison and hunting in South Africa and provides an important understanding of the market," says **Prof Laetitia Radder**, an acclaimed researcher in the field of wildlife and game marketing management whose experience in marketing, tourism, customer service and communication, is recognised at international, national and grassroots level.

Prof Radder has supervised 13 master's and doctoral students as well as published 17 articles in international journals, 51 articles in the local popular press and presented 14 papers at international conferences held in the USA, UK, Italy, Finland, Greece and Australia.

Even with all these impressive statistics and accolades, she still finds pleasure in teaching postgraduate students.

"I treasure students' jubilation and pride upon having successfully completed a difficult and challenging academic journey and saying 'I never thought I could make it, but I have done it!"

"Prof Miemie Struwig's unconventional coaching style motivated me to give of my best and she encouraged my perseverance. She also imbued me with a passion for research and the thrill of exploring new ground."

- Dutch postgraduate student Wouter Hensens, Academic Dean, Stenden University.



"We like to do projects that assist people so that their needs are met. We want people to be selfsufficient whereby they can fend for themselves."

 Prof Noxolo Mazibuko, Head of the Department of Business Management, whose research aims to benefit South Africa's poorer communities. "Enrolling for the Management Development Programme was no doubt one of my best decisions."

 Natasja-Tez Wallis, NMMU industrial engineering graduate, who completed a management development diploma and is a lean change agent manager for Ford Motor Company in Pretoria.

## Stay connected:

The Graduate School: Tel: 041 504 3777 Fax: 041 504 3891 E-mail: mbasa@nmmu.ac.za

The Leadership Academy: Tel: 041 504 4000 Fax: 041 504 4002 E-mail: business.school@nmmu.ac.za

## **NMMU Business School**

The business world has identified management, leadership and communication as essential skills lacking in employees at various occupational levels within the organisation. The Business School, based at the university's Bird Street Campus in the heart of the city, is hard at work addressing these shortcomings with a vast range of programmes to improve the business acumen of graduates and others.

Managerial, leadership and political skills are promoted in an environment that endeavours to mirror the workplace especially in terms of team work. Networking, a soft skill so essential for success in business today, is also encouraged. A low student/ lecturer ratio at the school also allows for constant interaction and maximum learning.

## The Graduate School

One of the school's acclaimed programmes is the "hands-on" MBA. An MBA, which is among today's most sought-after qualifications, equips individuals with advanced managerial competencies required to be an effective and dynamic leader of an organisation. The research focus of the MBA delivers advice and solutions to challenges within industry, but more than this, it allows students to develop the ability of what they have learnt in a practical situation.

The following units are housed within the Graduate School of Business:

- Family Business Unit: This unit focuses on families and the businesses they own and manage throughout Africa.
- The Unit Professional Ethics: This unit raises the consciousness of the innate ethical dimension of business, compliance and corporate governance.

### The Leadership Academy

The school also presents formal and non-formal programmes through the Leadership Academy aimed at professionals in the workplace. These programmes offer a thorough grounding in the fundamentals of business administration, management and leadership and range from certificates and diplomas with a learning pathway in place through which students can obtain a Management Diploma or even a BCom Business Studies degree.

The programmes, which emphasises the practical application of knowledge, are structured in such a way that you can obtain a qualification while working. When required, courses are offered in-house and customised to company needs. In order to increase the rate of return on training investment, more and more companies demand relevant tailor-made training, that will take their specific needs into account. The following units are also found within the Leadership Academy:

- The Executive Education Unit: A number of dynamic short learning and skills management and leadership diploma and certificate programmers for personal growth, progression and enhanced organisational performance are offered within this unit.
- Customised Learning Unit: Uniquely tailored and custom designed management, leadership and educationprogrammes, services and interventions for organisations are housed anddeveloped within this unit. An annual short course schedule is available on thewebsite: www.leadersfortomorrow.co.za
- Business Services: This unit offers entrepreneurial training and assistance to aspiring entrepreneurs, small business and the community. The schedule is available on the website.

#### PROGRAMMES

Note: Although most of the programmes are not regarded as postgraduate qualifications per se, they have been included because of their relevance to the development of professionals in the business sector.

Qualification	Programm	ne structure	Study option	
Quanneation	Research	Coursework	Full-time	Part-time
Academic programmes				
National Diploma (Management) — NQF 6		•		• (after hours)
BCom (Business Studies) – NQF 6		•		•
BTech (Business Administration) – NQF 7		•		•
Advanced Business Programme – NQF 7				•
MBA (Business Administration) NQF 7-8		•	•	•
DBA (Business Administration) NQF 8	•		•	•
Management programmes				
Basic Business Principles Programme (BBP) – NQF Level 2			•	92 hours in- house over a three-month period
Foundation Leadership Certificate Programme (FLP) – NQF Level 4	•		•	• 1 year
Intermediate Leadership Certificate Programme (ILP) – NQF Level 5		•		• 1 year
Business Management Programme (BMP) – NQF Level 5			•	• 1 year after- hours
Advanced Leadership Certificate (ALP) – NQF Level 5			•	• 1 year after- hours
Management Development Programme (MDP) — NQF Level 5			•	• 2 years after- hours
Executive Development Programme (EDP) - NQF Level 7		•		• 1 year in-house
Please visit the website at www.mbasouthathe programmes and admission requirement		or more deta	iled inform	ation on



## The importance of ethics

Permeating good values and morals throughout NMMU and beyond is **Prof Piet Naudé** (above), who heads up the university's Institute for Professional Ethics. The immediate past director of the NMMU Business School, and now the Deputy Vice-Chancellor: Academic Affairs, Prof Naudé specialises in ethics from a personal, corporate and global perspective. "My role is to instill a sound education and values in my students who will then hopefully create further awareness in terms of ethics in society."

With a master's in philosophy, a doctorate in theology and as an ordained pastor, Prof Naudé is ideally suited to spread the importance of ethics, compliance and corporate governance to postgraduates.

However, media, philosophy, theology and nursing students also benefit from his ethics classes as he endeavours to not only shape their own understanding of their values, but to "equip them to apply those values wherever they work".

Prof Naudé who has won countless research awards particularly within the field of Christian theology and ethics, has published two academic books and 55 journal articles. He has presented more than 100 papers at national and international conferences and in 2007 he achieved the rare distinction of being chosen to receive life membership from the Princeton Centre of Theological Inquiry.

## **Unit for Professional Ethics**

Courses in business ethics, as provided by the Institute for Professional Ethics, form an integral part of various programmes offered by the faculty. They equip managers with crucial ethical decision-making skills to handle situations constituting moral dilemmas and conflict of interest in the workplace.

## Overview of postgraduate programmes

#### DBA (BUSINESS ADMINISTRATION)

The primary aim of the Doctor of Business Administration degree is to provide candidates with the opportunity of conducting research in the field of business administration and management. The programme is made up of the thesis only. No coursework is required.

#### MBA (BUSINESS ADMINISTRATION)

The full-time MBA programme accommodates potential candidates from the international and national arenas who wish to study on a full-time basis. The programme runs over a period of four trimesters (about 18 months) and involves attending classes four times a week, Mondays to Thursdays from 17h30 to 20h30.

The part-time programme can be completed in a minimum period of nine trimesters (three years) and requires candidates to attend class twice a week, usually on a Monday and a Wednesday or a Tuesday and Thursday from 17h30 to 20h30.

#### SHORT LEARNING PROGRAMMES

A wide range of short courses is offered by the Management Development Centre in the following broad fields:

- ▶ Communication
- Customer service
- Personal development
- Improving performance
- Human resources and labour relations
- Leadership
- Management skills
- Economics
- Finance
- Law
- Quality
- Operations
- Safety
- Purchasing

Our public short course schedule for the year is available on request or can be downloaded from our website at www.mbasouthafrica.com

#### DID YOU KNOW?

• NMMU and the Coega Development Corporation, an industrial development zone on the outskirts of Port Elizabeth, have formed a mutually-beneficial partnership in which they support each other and work together on training, research, testing and advisory and consultancy services.



"The coming decade will see a great need for emerging leaders in business. These must be people with vision and with values. They will be needed in every industry and at every level of activity. One of the benefits of our MBA is that learning is anchored centrally in business, and graduates have knowledge of the theory as well as the application, making them specialists in management."

 Dr Margie Cullen, senior lecturer, who has more than 20 years' marketing experience

## Stay connected:

Unit for Professional Ethics Director: Prof Piet Naudé Tel: 041 504 2238 Fax: 041 504 2827 E-mail: piet.naude@nmmu.ac.za

Website: www.mbasouthafrica.com

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## **Encouraging critical thinkers**

As Director of the School for Initial Teacher Education, Dr Noluthando Toni plays a critical role in equipping students with the academic tools they will need as future educators and researchers.

While her primary role is to ensure all the undergraduate qualifications in the Faculty of Education are relevant to the classroom, Dr Toni is equally determined to create critical thinkers who are not afraid to tackle the big issues in their own postgraduate research.

She leads by example, her own research – an investigation into the deeper, nonpolitical realm of racism in higher institutions and how it affects learning – giving rise to practical solutions that "promote humanity", opening the channels of communication and contributing to a conducive organisational culture. Growing up in a Mossel Bay township, Dr Toni initially aspired to be a social worker, but fell in love with teaching after enrolling for her diploma – a path she initially chose as a means of funding her social work studies. But while teaching at Imekhaya Primary School in Mossel Bay's Kwa-Nonqaba township, Dr Toni realised she wanted more from life. "I was hungry for information. I realised I could do more and offer more." She soon embarked on her BPrimEd, which led to her honours and masters studies and then a lecturing contract at NMMU, which became permanent. From there, it was just a matter of time before this hardworking academic was recognised as a leader, climbing the ranks to her current position. Her doctorate researched implicit racial divides at NMMU. "I feel it is important to link research into one's work environment – and ensure that it makes a contribution ... It was especially important for me, in my management role, to have a sense of the environment in which students learn, as this will influence the way they perform."

## **Faculty of Education**

Guiding tomorrow

#### he Faculty of Education is committed to the development of competent leaders in education who are able to operate in diverse environments, meeting the challenges of education in South Africa.

The faculty contributes significantly to the professional development of teachers by means of relevant upgrading and postgraduate study opportunities and also puts a strong emphasis on community outreach initiatives. In short, it endeavours to respond to real needs in the country – hence, for example, its programme in advanced education in HIV/Aids and teaching.

In order to accommodate working teachers many of the postgraduate programmes, as well as the upgrading programmes for in-service teachers, are offered outside of school hours.

## Faculty schools and departments

- School for Initial Teacher Education
   Department of Foundation Phase Studies
   Department of Intermediate Phase Studies
   Department of Further Education and Training Studies
- School for Continuing Professional Development
   Department for Advanced Studies in Education
   Department of Science, Mathematics and Technology Education
- School for Education Research and Engagement
- Faculty of Education Off-Campus Unit
- Action Research Unit
- Research Chair HIV/Aids
- Centre for the Community School

# School for Professional Teaching Education

#### PROGRAMMES

#### **Upgrading programmes**

Note: Although these programmes are not regarded as postgraduate qualifications per se, they have been included because of their relevance to the professional development of educators

			<b>C</b> 1 1	
Qualification	Programm	e structure	Study	option
quantation	Research	Coursework	Full-time	Part-time
National Professional Diplomas in Edu	cation			
NPDE (Foundation Phase) – 360 credits		•		•
NDPE (Intermediate Phase) – 360 credits		•		•
NDPE (Senior Phase) – 360 credits		•		•
NPDE (Further Education & Training) – 360 credits		•		•
Advanced Certificates in Education				
ACE (Special Needs Education: Remedial Education)		•	•	•
ACE (HIV/AIDS in Teaching)		•		•
ACE (Mathematics, Science & Technology Education - Senior Phase)		•		•
ACE (Mathematical Literacy – FET Band)		•		•
ACE (School Leadership)		•		•
Bachelors of Education (upgrading)				
BEd (Foundation Phase) – Grade 0 - 3		•		•
BEd (Intermediate Phase) – Grade 4 - 6		•		•
BEd (Further Education and Training Band: Mathematics)		•		•



"Given the poor state of education in South Africa, it is vital for more teachers to improve the situation by gaining a better understanding of the context in which they work. Research into the complexities in the education arena is necessary to positively impact on our country."

#### - Prof Denise Zinn, Faculty of Education Dean

## Stay connected:

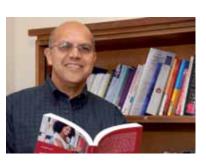
General information Tel: 041 504 2162 E-mail: postgrad@nmmu.ac.za

Faculty administration Tel: 041 504 2125/4568

Faculty website www.nmmu.ac.za/education

"A country-wide assessment of grade 3 and 6 pupils has revealed shockingly low levels of literacy and numeracy. Much work needs to be done."

- International Reading Literacy Study, June 2011



"Research always leads to a better understanding of our social reality and contains within it the power to transcend, and the potential to change."

 Dr Sylvan Blignaut, Emerging Faculty Researcher of the Year 2010

#### ADMISSION

Programme type	Requirements
National Professional Diplomas in Education	Full-time, in-service teachers whose professional teaching qualifications are evaluated at below NQF level 5 (REQV 10 to enter at 1 <sup>st</sup> year level and REQV 11 & 12 to enter at 2 <sup>nd</sup> year level) At least two years' teaching experience in the foundation, intermediate or senior phases
Advanced Certificates in Education	All students shall be subject to selection A professional teaching qualification of at least NQF level 5
Bachelors of Education (upgrading)	A recognised teaching qualification (minimum three years) (REQV 13) At least five years' teaching experience in the specific phase Currently employed in a recognised teaching post

Please consult the faculty officer or view www.nmmu.ac.za/education for additional requirements as stipulated by the department



#### ADMISSION

Programme type	Requirements
Postgraduate Certificate in Education (PGCE)	All prospective student teachers shall be elected A candidate must be in possession of a degree, or suitable qualification that complies with specific requirements as stipulated by the faculty
Postgraduate Certificate in Higher Education (PGCHE)	Candidates must concurrently be teaching at a higher education institution, and at least have a discipline-related qualification at NQF level 6
BEd Honours degrees	A candidate shall be admitted only on the grounds of a selection procedure stipulated by the faculty Candidates must be in possession of a qualification at, or equivalent to, NQF level 6 or additional requirements as stipulated by the faculty
Master's research degree	BEd Honours or an approved teaching qualification and an honours degree in a field in the list of approved school subjects or in a field related to education
Master's coursework degree	A candidate shall be admitted only on the grounds of a selection procedure stipulated by the faculty A qualification at, or equivalent to, NQF level 7, or additional requirements as stipulated by the faculty.
Doctoral degrees	MEd or an approved teaching qualification and education- related master's degree with one year of appropriate teaching experience
Please consult the faculty requirements as stipulate	officer or visit www.nmmu.ac.za/education for additional d by the department

#### POSTGRADUATE PROGRAMMES

Qualification		Programm	ne structure	Study	option	
Qualinca	uon	Research	Coursework	Full-time	Part-time	
Postgrad	uate Certificates (PGC)					
PGCE	Education		Coursework plus teaching practice	•	•	
PGCHE	Higher Education		Coursework plus portfolios	•	•	
BEd Hond	ours degrees					
BEdHons	Whole School Development & Educational Psychology		•	•	•	
BEdHons	Mathematics Education හ Science Education		•		•	
BEdHons	Mathematical Literacy		•		•	
Master's o	degrees					
MEd	Education	•		•	•	
MEd	Educational Management	•	•		•	
MEd	Special Needs Education	•	•		•	
MEd	Curriculum Policy, Development and Management	•	•	•	•	
Doctoral o	Doctoral degrees					
DEd/PhD	Education	•		•	•	



"A cross-faculty TESOL (TEACHING English to Speakers of Other Languages) study between the Department of Applied Language Studies (Faculty of Arts) and the Faculty of Education resulted in community engagement with the Human Dignity Centre in Walmer."

## School for Continuing Professional Development

The School for Continuing Professional Development offers a wide choice of professional development opportunities. In doing so, teachers can improve their content knowledge and teaching skills in various specialisations.

The Continuing Professional Development programmes have been well researched and incorporate the latest international trends, but have also been contextualised for the South African situation.

The department also offers a number of advanced Certificates in Education (ACE) in fields such as special needs education, HIV/Aids in teaching, and school leadership. Under-qualified teachers who wish to obtain "qualified teacher status" may opt to study further for the National Professional Diploma in Education.

- ACE (School Leadership)
- ► ACE (HIV/AIDS in Teaching)
- ► ACE (Special Needs Education)
- ▶ ACE (Mathematical Literacy FET Band)
- ACE (Mathematics, Science and Technology)
- > ACE (Language in Learning and Teaching)



"The TESOL course was an enriching experience which equipped me with the relevant methodology and techniques needed in order to succeed as a teacher in a student centred environment."

 Neall de Beer, a journalist who taught English in the Ukraine

## Teaching English to speakers of other languages

Students are offered the opportunity of obtaining an internationally-recognised qualification in Teaching English to Speakers of Other Languages (Tesol), which enables you to teach all over the world.

The faculty, in association with the School for International Training in America, offers the internationally-recognised SIT TESOL certificate course. This is an intensive fourweek course combining theory and practical teaching opportunities.

## Stay connected:

School for Continuing Professional Development Director: Dr Alette Delport Tel: 041 504 4590 E-mail: aletta.delport@nmmu.ac.za Website: www.nmmu.ac.za/education

Teaching English to speakers of other languages Lecturer: Eileen Scheckle Tel: 041 504 3444 E-mail: eileen.scheckle@nmmu.ac.za



"One of my roles as HIV/Aids Chair in Education is to strengthen and draw together the HIV/Aids research that is already taking place within the faculty. Much more needs to be done to engage students and staff in issues concerning HIV/Aids in education."

 Naydene de Lange, HIV/Aids Chair in Education

## Stay connected:

Centre for Educational Research Technology and Innovation (CERTI) Paul Webb Tel: 041 504 4206 E-mail: paul.webb@nmmu.ac.za

Action Research Unit Lesley Wood Tel: 041 504 2834 E-mail: lesley.wood@nmmu.ac.za

## Centre for Educational Research Technology and Innovation (CERTI)

The Faculty of Education's Centre for Educational Research Technology and Innovation (CERTI) mission is to generate meaningful research that is applicable to both our South African and international contexts, and to serve varied communities via innovative projects and technologies.

As such the centre introduces new research projects; through supervision of masters and doctoral research; and via community involvement, engagement and outreach.

Members of CERTI are currently involved in major community based projects such as the Masenze umehluko Project ('Reaching out to make a difference' project in schools in Motherwell, Port Elizabeth), the Amathole Project (Mathematics and language project in the Keiskamma Hoek district), The North West Project (Mathematics and language project in the North West Province), the Family Maths and Family Science Projects in Port Elizabeth, George, East London and Beaufort West, and the Science Literacy Project in the former Transkei with the READ organisation.

## HIV and Aids Research Chair

The HIV and Aids Education Research chair is a new initiative of the Faculty of Education to promote research and engagement within educational settings in general and within poor communities in particular. The Chair promotes research in the field of HIV and Aids by providing academic leadership, conducting research projects, publishing research, supervising postgraduate students, ensuring academic engagement and facilitating learning processes within the focus area.

A key approach of the research undertaken by the HIV and Aids Education Research Chair draws on visual participatory methodologies, such as drawing, collage, photovoice, participatory video and digital archive, in an attempt to facilitate social change through research. This work builds on research initiated in 2004 in the Center for Visual Methodologies for Social Change (http://cvm.ukzn.ac.za).

Connect to: Prof Naydene de Lange Tel: 041 504 4519 • Email: naydene.delange@nmmu.ac.za



## Action Research Unit

This Unit was founded wit h the aim of expanding opportunities for researchers, students and practicing teachers to conduct action research for social and educational improvement.

In principle, action research means developing attitude: looking at any educational problem and saying "I can do something about this".

In reality, it is often far from easy. There are challenges to overcome: politicallogistical difficulties such as under resourcing, large classes and intense poverty: cultural attitudes, such as the undervaluing of teachers, the bad press they receive, and their resultant deepening demoralisation: and the self-perception on the part of many teachers that they are inadequate, helpless, and unable to do anything about the situation. However, Action Research can enable teachers to overcome possible negative self-perceptions and learn how to become resourceful. The Masilingane Project is a prime example of this





- Dr Tulsi Morar, Off-Campus Unit Manager

## School for Education Research and Engagement (SERE)

The exciting and challenging context of South African education demands educators, managers and planners that are highly skilled, knowledgeable and effective leaders in their respective spheres of influence. Our programmes provide opportunities for such change agents to make a difference by engaging in communities of scholarship, participating in cutting-edge research and contributing to innovative and visionary solutions to the present challenges in the Southern African arena.

The School for Education Research and Engagement (SERE) offers exciting possibilities for students to progress meaningfully in their academic and professional careers. The school offers an Honour's Programme in the specialisation of Whole School Development, Mathematics and Scirence Education as well as Mthematical Literacy as well as Masters and Phd Programmes

## NMMU off-campus teaching programmes

The Faculty of Education Off-Campus Unit coordinates the delivery of high quality tuition at various centres throughout the Eastern Cape to ensure that teachers in remote areas benefit from the wide range of upgrading study opportunities provided by the Faculty of Education.

BEd and BEd Honours degree programmes, as well as Advanced Certificate and National Professional Diploma programmes are currently run at centres in Mbizana, Kokstad, Lusikisiki, Tsolo, Mthatha, Ngcobo, Queenstown, Graaff-Reinet and King William's Town, as well as in Isipingo in KwaZulu/Natal.

## Centre for the Community School (CSS)

The creation of this centre is timely, as its core purposes align with both the university's mission to be a relevant and engaged institution in South African society, and the current focus on addressing the serious education challenges in the country. It is also the first centre of its kind in South Africa.

The Centre will focus on developing and expanding the knowledge base of community schools in the country – a grouping of schools that are engaged in simultaneous efforts to improve teaching and learning, as well as address some of the social challenges that affect these core processes. These schools work to achieve their objectives by building active partnerships with parents, community members, and other education stakeholders.

Connect to: Dr Allistair Witten Tel: 041 504 1168 • Email: allistair.witten@nmmu.ac.za



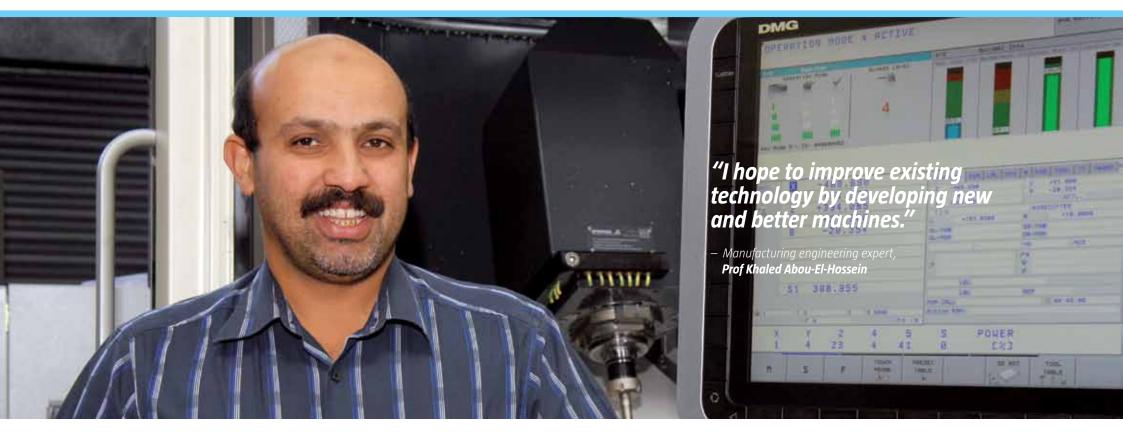
"Participation research is not only tremendously rewarding and growth-enhancing for all involved, but also produces knowledge that practically makes a difference in the quality of education delivered."

 Dr Lesley Wood, Faculty Researcher of the Year 2010

### Stay connected:

School for Education Research and Engagement Director: Prof Nonnie Botha Tel: 041 504 2104 E-mail: nonnie.botha@nmmu.ac.za

## Technology for tomorrow



## Machines that matter

Advances in technology are impossible without advances in machining and other processing operations. The two go hand in hand – a concept which is driving the innovative research carried out by manufacturing engineering expert **Prof Khaled Abou-EI-Hossein**.

An associate professor in NMMU's Mechatronics Department and director of the Centre for Mechatronics and Manufacturing, Prof Abou-El-Hossein's research focuses mainly on metal cutting, with projects in this area including the machining of aerospace alloys and tool steels. Another research interest is laser powder deposition. For this, he is pioneering a research project in which he is trying to produce from titanium powder a functionally-graded structure that could be suitable for medical implants. "We want to make these implants successful for tissue ingrowth (the process whereby the body tends to grow tissue, e.g. muscle or scar tissue, in, around and through foreign objects)," said Prof Abou-El-Hossein, a NRF C3-rated researcher. His third research interest is manufacturing systems.

He is leading a consortium between NMMU, the University of Pretoria and North-West University, working on the development of a virtual system to demonstrate the principles of reconfigurability in the production of dies and moulds.

He ultimately hopes to improve existing technology by developing new and better machines (e.g. hybrid machines that are based on the combination of a variety of principles), thereby overcoming some of the challenges encountered in machining. In addition, he is also looking at the application of ultra-high precision machining in the fabrication of delicate and complex products such as lenses and sensors.

Prof Abou-El-Hossein, who hails from Saudi Arabia, studied manufacturing engineering to doctoral level at the National Technical University of Ukraine (Kiev).

## Faculty of Engineering, the Built Environment & Information Technology

Technology tomorrow

he Faculty of Engineering, the Built Environment & Information Technology combines state-of-the-art facilities and technology with stimulating training to produce highly sought-after experts in the fields of civil, electrical, industrial or mechanical engineering, mechatronics, information technology, quality and operations management, quantity surveying and construction management.

As a result, our graduates are able to access career opportunities all over the globe.

World-class research within the faculty includes:

- Friction stir processing
- Manufacturing technology
- Automotive manufacturing
- ▶ Telecommunication
- Multimedia
- Construction health and safety.

All programmes, where applicable, are accredited by the relevant professional bodies. This means we are internationally accepted. Further testimony to this is the number of international partners who already collaborate with us.

Apart from the academic departments within each school, there are various entities - institutes, centres and units – that promote research, technology transfer, non-formal teaching, and community service and outreach initiatives. A great deal of research, especially applied research is conducted across the faculty.

## Schools, departments and research entities

#### SCHOOL OF ENGINEERING

- Department of Civil Engineering
- Department of Electrical Engineering
- Department of Industrial Engineering
- Department of Mechanical Engineering
- Department of Mechatronics

### Entities

#### (eNTSA)

Prof Danie Hattingh • Tel: 041 504 3608 • E-mail: danie.hattingh@nmmu.ac.za Friction Processing Research Institute (FPRI)

Dr Annelize Els-Botes • Tel: 041 504 3091 • E-mail: annelize.els-botes@nmmu.ac.za Advanced Mechatronic Technology Centre (AMTC)

Karl du Preez • Tel: 041 504 3644 • E-mail: karl.dupreez@nmmu.ac.za

#### SCHOOL OF THE BUILT ENVIRONMENT

Department of Building and Quantity Surveying

Department of Construction Management

#### Entities

#### **Unit for Building Research and Support**

Kobus Bekker • Tel: 041 504 3075 • E-mail: jp.bekker@nmmu.ac.za

#### Unit for the Study of Construction Processes

Prof John Smallwood • Tel: 041 504 3075 • E-mail: john.smallwood@nmmu.ac.za

#### Built Environment Research Centre (BERC)

Prof Winston Shakantu • Tel: 041 504 2394 • E-mail: winston.shakantu@nmmu.ac.za

#### SCHOOL OF INFORMATION & COMMUNICATION TECHNOLOGY

#### Department of Applied Informatics

#### Department of Information Technology

#### Entities

#### Institute for Information & Communication Technology Advancement (IICTA)

Prof Rossouw von Solms • Tel: 041 504 3604 • E-mail: rossouw.vonsolms@nmmu.ac.za Centre for Information Security Studies (CISS)

Prof Rossouw von Solms • Tel: 041 504 3604 • E-mail: rossouw.vonsolms@nmmu.ac.za Spatial Technologies Unit

Prof Dalenca Pottas • Tel: 041 504 3668 • E-mail: dalence.pottas@nmmu.ac.za



"Our faculty will continue to provide quality graduates and technological innovation and put society at the centre of our activities."

 Prof Henk de Jager, Dean of the Faculty of Engineering, the Built Environment and Information Technology

### Stay connected:

Faculty administration Tel: 041 504 3447 (Engineering) Tel: 041 504 3480 (Built Environment) Tel: 041 504 3660 (Information & Communication Technology)

Faculty website www.nmmu.ac.za/engineering

General information Tel: 041 504 2162 E-mail: postgrad@nmmu.ac.za



"I have a passion for testing the frontiers of technology with industry, exploring new ways to ensure we become more effective in the way we use natural materials and energy. It is second nature for me to share information and there is no better way than lecturing to young people and sharing the same passion for pushing technology. My research is my hobby and my hobby is my research."

> Prof Danie Hattingh, eNtsa head, whose responsibility it is to develop and transfer technology for the benefit of small and medium enterprises

#### DID YOU KNOW?

• NMMU has won the National Innovation competition for two consecutive contests beating all of South Africa's top universities.

## The School of Engineering

This school consists of an integrated combination of five discipline-specific engineering departments and offers an extensive range of Engineering Council of South Africa accredited postgraduate programmes in the fields of:

- Civil engineering
- Electrical engineering
- Industrial engineering
- Mechanical engineering
- Mechatronics
- Operations management
- Quality

Interactive and collaborative postgraduate research at master's and doctoral level is mainly focused through the Institute for Advanced Manufacturing and Engineering Research (IAMER) and the International Chair of Automotive Engineering which is co-funded by VWSA and the German Academic Exchange Service (DAAD). The establishment of IAMER and the Chair in the School of Engineering is enabling the school to expand and develop postgraduate studies as well as exchange programmes with other international academic institutes. Furthermore, the school works closely with local industry through project work, contract research and technology transfer.

#### PROGRAMMES

Qualification	Programn	ne structure	cture Study opt	
Quanneation	Research	Coursework	Full-time	Part-time
MTech (Civil Engineering)	•		•	•
MTech (Electrical Engineering)	•		•	•
MTech (Industrial Engineering)	•		•	•
MTech (Mechanical Engineering)	•		•	•
MTech (Operations Management)	•		٠	•
MEng (Mechatronics)	•		٠	•
MTech (Operations)	•		٠	•
DTech (Electrical Engineering)	•		٠	•
DTech (Mechanical Engineering)	•		•	•
DTech (Operations Management)	•		•	٠
PhD Mechatronics	•		•	•



#### SPECIFIC RESEARCH AREAS

- Friction Stir Welding (FSW) for the manufacturing industry
- > Laser Materials Processing (LMP) for the motor manufacturing industry
- Intelligent maintenance systems for manufacturing
- Metallurgy
- Surface protection technologies
- Robotics
- Autotronics
- Project management

#### ADMISSION

Programme type	Requirements		
Master's degrees	A relevant bachelor degree (BSc, BEng, BTech) or equivalent approved by Senate A detailed CV must accompany the application in the case of equivalent qualifications		
Doctoral degrees	A relevant master's degree or equivalent approved by Senate A detailed CV must accompany the application in the case of equivalent qualifications		
Please consult the faculty officer or visit www.nmmu.ac.za/engineering for additional requirements as stipulated by the department			

## Advanced Mechatronics Technology Centre

NMMU has a multi-million rand mechatronics centre that replicates actual state-ofthe-art manufacturing conditions and enables our students to proceed comfortably into a work environment anywhere in the world. General Motors South Africa invested R1m in the new centre allowing students to keep abreast of the latest trends and technology.

Connect to: Karl du Preez Tel: 041 504 3644 • E-mail: karl.dupreez@nmmu.ac.za



"There certainly are very few opportunities to get involved in the design and build of a race car in South Africa. This project is truly unique."

 Howard Theunissen, Mechanical Engineering lecturer and faculty advisor for the Formula Student project

## VWSA-DAAD International Chair in Automotive Engineering

In an effort to increase local engineering expertise, NMMU in partnership with Volkswagen South Africa (VWSA) and the German Academic Exchange Service (DAAD) has an International Chair in Automotive Engineering.

This initiative significantly contributes to improved and relevant higher education in the field of engineering. Postgraduate students are involved in establishing new research and developmental trends within materials and manufacturing technology, and are actively involved in international collaborative research. Funding for postdoctoral positions and visiting professors is also available.

Connect to: Prof Theo van Niekerk Tel: 041 504 3091 • E-mail: theo.vanniekerk@nmmu.ac.za

### Stay connected:

MerSETA Chair in Engineering Karl du Preez Tel: 041 504 3464 • E-mail: karl.dupreez@nmmu.ac.za

GMSA Chair in Mechatronics Prof Igor Gorlach Tel: 041 504 3289 • E-mail: igor.gorlach@nmmu.ac.za

## Driven by 'real world' experience

Port Elizabeth is the "Detroit of Africa", the place where cars and automotive careers are made. This manufacturing culture – so critical for South Africa's future – thrives on campus too. Our university was the first in South Africa to design, build and race a single-seater Formula 1 type car, as part of the international student design competition, Formula Student.

The multi-disciplinary team includes students from Mechanical Engineering, Electrical Engineering, Psychology, Mechatronics and Information Technology. NMMU's emphasis on "real world" work experience – supported by our diverse business and engineering links – has kick-started many successful automotive careers.

Our cutting-edge projects in friction stir welding, rubber research in vulcanisation chemistry, international student exchange programmes, robotics and mechatronics in state-of-the-art laboratories makes NMMU the hands-on university of choice for mechanical and industrial engineers.

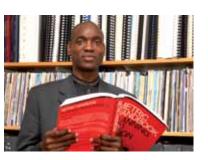
"I will always remember the innovative dynamic environment at NMMU and my very skilled, dedicated and supportive promoters. Today I know NMMU can compete on an even level with other international institutions."

 Dr Grant Kruger, Research Fellow at them Manufacturing Research Centre at the University of Michigan, who graduated in 2005.

#### DID YOU KNOW?

- Engineering students practice on "Penelope", a robot in their robotics laboratory.
- The faculty has various partnerships with industry to carry joint research projects. Eskom, the CSIR Foundation, VWSA, SAP Research are among them.
- The faculty has close relationships with international universities and research institutes such as the universities of Michigan, Plymouth, Florida, Reutlingen, Sheffield and the universities of applied sciences of Braunschweig-Wolfenbüttel, Ingolstadt and the Institute Laueaue-Langevin.
- NMMU won the award for the most innovative machine in the National Siemens Cyber Junkyard competition in 2010

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"I am motivated by research the discovery of new knowledge within the construction industry."

> - **Prof Winston Skakantu,** School of the Built Environment

## Stay connected:

Director: Derick Vosloo Tel: 041 504 3201 E-mail: derick.vosloo@nmmu.ac.za Website: www.nmmu.ac.za/engineering

Department of Building and Quantity Surveying Head of Department: Prof Fanie Buys Tel: 041 504 2023 E-mail: fanie.buys@nmmu.ac.za Website: www.nmmu.ac.za/qs

Department of Construction Management Head of Department: Prof John Smallwood Tel: 041 504 2790 E-mail: john.smallwood@nmmu.ac.za

## The School of the Built Environment

This school, with its two departments – Building and Quantity Surveying, and Construction Management – offers various postgraduate study opportunities in fields related to the building and property environment, such as project management, facilities management, construction management, construction health and safety, property economics and valuation. There are also programmes that develop organisational and analytical skills, business management and research competencies relevant to the quantity surveying profession.

Its programmes are highly acclaimed and have national and internal accreditation. Quantity surveying degrees from NMMU are accredited by both the South African Council for the Quantity Surveying Profession and the Royal Institution of Chartered Surveyors in Britain. Our Construction Management qualifications are not only accredited locally by the professional association for construction managers in South Africa, the Chartered Institute of Building (Southern Africa), but also internationally by the Chartered Institute of Building (United Kingdom).

#### SPECIFIC RESEARCH AREAS

- > Construction management principles, processes and techniques
- > The functional behaviour and performance of buildings
- Tertiary education in the construction industry
- Safety, Health and Environment (SHE) (broad spectrum)
- Ergonomic design in relation to health and safety
- Property economics and valuation
- Facilities management
- Housing management
   Maintenance management
- Built Environment general (construction logistics management, etc.)
- Building contracts
- Financial management for contractors
- Problems related to low cost housing projects

## Unit for the Study of Construction Processes

This unit undertakes research related to a wide spectrum of construction-related processes and issues for the benefit of the construction and other broader communities, both nationally and internationally. It produces a large number of peer-reviewed journal and conference papers annually. It also regularly organises international conferences.

Connect to: Prof John Smallwood

Tel: 041 504 2790 • E-mail: john.smallwood@nmmu.ac.za

"The new graduate was tasked with work that was, to a certain extent, way above his experience at the time. He performed these tasks with vigour and a sense of responsibility that one expects from NMMU graduates. As a firm we have made a decision only to employ NMMU graduates."

- Hiki du Plessis, director of a quantity surveying firm in Bhisho



## **Built Environment Research Centre**

Professor of Construction Management Winston Shakantu's in-depth research into whether the efforts of government to grow Small, Medium and Micro Enterprises (SMMEs) in the construction industry are paying off – in terms of improving infrastructure delivery, creating jobs and enhancing competitiveness within the industry – saw him win top honours at a leading construction conference.

Prof Shakantu is director of NMMU's Built Environment Research Centre.

"The problem is that there are about 40 000 SMMEs in the country's construction industry. Despite government's good intentions to provide jobs for many of these, they can't satisfy everybody," says Prof Shakantu.

#### PROGRAMMES

Qualification	Programm	Programme structure		Study option	
Quanneation	Research	Coursework	Full-time	Part-time	
BScHons (Construction Management)		•	•		
BScHons (Quantity Surveying)		•	٠		
PGDip Built Environment		•	•	•	
PGDip (Construction Management)		•	٠		
MTech (Quantity Surveying)	•		٠	•	
MTech (Construction Management)	•		•	•	
MSc (Built Environment): - Facilities Management - Property Economics & Valuation - Project Management - Construction Management - Construction Health & Safety Management		•		•	
MSc (Construction Economics)	•		٠	•	
MSc (Construction Management)	•		•	•	
PhD (Construction Economics)	•		•	•	
PhD (Construction Management)	•		•	•	

"The experience that I have gained here (Dublin/Ireland) during the 'Celtic Tiger' years is invaluable and it would not have been possible if I did not get a top notch education from NMMU. I am forever in their debt."

- **Dr Gerrit Crafford**, who obtained his doctorate in quantity surveying in 2007

#### ADMISSION

Programme type	Requirements	
Honours degrees	BSc in related field or equivalent approved by Senate	
Postgraduate diplomas	BSc in related field or equivalent approved by Senate	
MSc degrees	A relevant BSc Honours degree or equivalent approved by Senate A minimum of five years or relevant working experience	
MTech degrees	BTech in related field or equivalent approved by Senate	
Doctoral degrees	A relevant master's degree or equivalent approved by Senate	
Please consult the faculty officer or visit www.nmmu.ac.za/engineering for additional requirements as stipulated by the department		



"It is commonly accepted that information is a critical asset and its protection is of utmost importance. This is no exception in the health sector where the improper use or disclosure of health information could have disastrous consequences. This embodies the core focus of my research, namely the broad areas of health informatics and information security."

> - **Prof Dalenca Pottas,** Director: School of Information and Communication Technology

# The School of Information and Communication Technology

Computers have changed our world and continue to do so. At the heart of these changes is this school offering postgraduates the opportunity of dynamic research under the tutelage of established experts in their field.

Within the school is the NMMU niche research area of business information risk and security approved by the Institutional Research Development Programme of the National Research Foundation (NRF) in 2006. The NRF focus area project – Governance of IT Risk and Information Security – is also registered with the institute.

#### SPECIFIC RESEARCH AREAS

- Information security
- Workflow technology
- Usability studies
- Supply chain management
- Knowledge integration
- Mobile technologies



#### PROGRAMMES

Qualification	Programm	e structure	Study option	
Guanneation	Research	Coursework	Full-time	Part-time
MTech (Information Technology)	•		•	•
PhD (Information Technology)	•		•	•

#### ADMISSION

Programme type	Requirements
Master's degrees	A relevant Bachelor of Technology (BTech) degree or a suitable equivalent M+4 qualification in Information Technology as approved by Senate
Doctoral degrees	A relevant Master of Technology (MTech) degree or a suitable equivalent M+5 qualification in Information Technology as approved by Senate
Please consult the facul requirements as stipula	ty officer or visit www.nmmu.ac.za/engineering for additional ted by the department

### Stay connected:

Director: Dr Dalenca Pottas Tel: 041 504 9100 E-mail: dalenca.pottas@nmmu.ac.za Website: www.nmmu.ac.za/sict "Prof Von Solms provided me with a great opportunity to learn from his extensive knowledge in the subject area of IT governance and information security. Completing a postgraduate qualification may seem a daunting task but with hard work and Prof Von Solms to motivate you, the results will speak for themselves."

- Shaun Posthumus, former DTech student

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## Making IT accessible

Making Information Technology accessible for all is the motivating force behind **Darelle van Greunen**'s groundbreaking doctoral research in user interface design.

The 2010 Emerging Faculty Researcher of the Year and 2007 NRF Top Achiever is developing among others, a blended learning model for students from diverse backgrounds throughout Africa. "Education should not be optional but a basic human right that allows us to prepare for our future. My goal is to make that education accessible to all," says the linguist (she is proficient in five languages) who supervises many foreign IT students.

With a background in teaching in rural South Africa, and of later living and working in Europe, Darelle has been able to marry the possibilities of First World IT standards with the practical realities of developing nations within her research.

Her drive to make a difference means she not only engages with educational initiatives but also with the IT industry both nationally and internationally to ensure appropriate and successful human computer interaction.

## Institute for ICT Advancement (IICTA)

This institute is home to the Centre for Information Security Studies (CISS) which manages a number of information security-related activities including research, conferences, courses and consulting services.

The success of the latter is mainly due to its pro-active, practical approach to research. "Our aim is to find new techniques, new models and new methodologies to enhance information security in the business environment. That's why we work with and within businesses and organisations," says Prof Rossouw von Solms who heads both IICTA and CISS.

Various journal and conference papers have stemmed from researchers at CISS and its applied research has directly benefited industry over the years. A significant number of students have obtained postgraduate degrees. Indeed students who have acquired postgraduate degrees under the auspices of CISS have all gone on to acquire sought-after jobs in industry.

Connect to: Rossouw von Solms Tel: 041 504 3604 • E-mail: rossouw.vonsolms@nmmu.ac.za



"Information is a vital asset to most organisations and the protection thereof is essential for success. The complexities of the link between information security, education and corporate culture cannot be fully appreciated without comprehensive and ongoing research."

- **Dr Kerry-Lynn Thomson,** Emerging Faculty Researcher of the Year 2010

"Apart from being very knowledgeable, my supervisor, Darelle van Greunen is very understanding and helpful."

- IT master's student Alexandros Yeratziotis of Cyprus

## Caring for tomorrow

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## Waging war on HIV/Aids

UNAIDS estimates that 5,5 million, or one in nine people in South Africa, is living with HIV/Aids. Among HIV-positive women, 95 per cent discovered their status during ante-natal care.

For nursing science lecturer and trained midwife **Dr Sindiwe James**, one of many NMMU researchers determined to fight the scourge of HIV/Aids in this country, investigating teen pregnancy was a critical starting point in tackling the pandemic. "It is generally midwives who end up meeting the majority of young people with HIV/Aids. This provides a good opportunity for us to talk to them, assess their situation, and see what we can do," said Dr James, who was the 2006 Emerging Faculty Researcher of the Year.

Ultimately, she aims to empower a peer support group, where young mothers talk to pupils about the risks of unprotected sex and the reality of becoming a parent while at

school, in the hope that this will reduce both teenage pregnancy and HIV/Aids. "It would make such a difference if teens could listen to people their own age sharing their personal experiences."

Dr James, working closely with postgraduate students, has uncovered a number of reasons for teen pregnancy, most of them linked to socio-economic factors and the non-accessibility of contraceptives. Two articles arising from this study were published. "What I'm trying to do is to build the bigger picture around teenage pregnancy. I want my research to really make an impact and reduce the spread of HIV/Aids."

Dr James is also conducting research into the emotional impact of becoming a teenage mother, which leads to many pupils dropping out of school. Her other research interest is post-natal assessment of women in KwaZakhele, a collaborative project with Manchester University.

## **Faculty of Health Sciences**

Caring for tomorrow

## The faculty departments

- Biomedical Technology and Radiography
- Environmental Health and Social Development Professions
- Human Movement Science and Sport Management
- Nursing Science
- Pharmacy
- Psychology

## **Research entities**

- Biokinetics and Sport Science Centre
- University Psychology Clinic
- Drug Utilisation Research Unit
- Cyclic Peptide Research Unit



"Our longstanding partnership with hospitals, clinics, community organisations and industry, provide our students with excellent opportunities for experiential learning and research."

- Prof Raj Naidoo, Health Sciences Faculty Dean

#### DID YOU KNOW?

 For the past three years, NMMU BPharm graduates have attained the top marks in the external pharmacy examinations.

### Stay connected:

Faculty administration Tel: 041 504 2121 Tel: 041 504 2956/7

Faculty website www.nmmu.ac.za/health

Faculty e-mail address healthsciences@nmmu.ac.za

romoting well-being is the watchword of the Faculty of Health Sciences. This rallying cry to improve all-round health in South Africa and beyond is tied up in each of the faculty's diverse range of programmes – from the caring pragmatism of its nursing qualifications to the internationally-applauded pharmaceutical research.

These professional health disciplines boast a dynamic multi-cultural composition of students from throughout Africa who come to benefit from top tuition in a relaxed environment.

Each department, in keeping with the needs of serving society, actively encourages hands-on training. This ensures our postgraduate students are better prepared for the realities of their chosen careers, and likewise, are deemed better employee prospects since they already have practical experience. Graduates from this faculty are working throughout the world today.

The faculty's research strives towards its mission of preventing and treating illness and enhancing health and wellness, and many research partnerships exist with institutions in the United Kingdom, Australia, America, Europe and Africa. Yes, we're internationally connected.

Both coursework and research options are available for postgraduate students within each department. Many bursaries are offered too.

*"With the third largest population in South Africa, health care for the Eastern Cape's seven million residents is one of its primary focuses."* 

## Department of Biomedical Technology and Radiography

The biomedical technology sector of the department is renowned for its efforts in the areas of indigenous plant knowledge, TB and diabetic research, as well as the knowledgeable guidance it gives its students. Its staff considers it imperative that excellent research be founded on the skilful integration of sound experimental methodology and up-to-date global research findings and theory.

The radiography sector is committed to the education and training of students for careers in the field of diagnostic radiography. Graduates also have the opportunity to proceed on a postgraduate level with research to keep abreast with the latest developments in the profession.

#### PROGRAMMES

Qualification	Programm	e structure	Study option	
Qualification	Research	Coursework	Full-time	Part-time
MTech (Biomedical Technology)	•		•	•
MTech (Radiography)	٠		•	•
DTech (Biomedical Technology)	•		٠	•

#### ADMISSION

Qualification type	Requirements		
MTech	BTech in the appropriate field or equivalent qualification		
DTech	MTech (Bio Med) or equivalent qualification		
Please consult the faculty officer or visit www.nmmu.ac.za/health for additionarequirements as stipulated by the department.			

## Stay connected:

Faculty of Health Sciences Tel: 041 504 2815 E-mail: ilse.vanderwatt@nmmu.ac.za Website: www.nmmu.ac.za/health

## Biomedical Technology

Dr Nanette Smith • Tel: 041 504 3102 E-mail: nanette.smith@nmmu.ac.za

#### Radiography

Sydney Campbell • Tel: 041 504 3450 E-mail: sydney.campbell @nmmu.ac.za



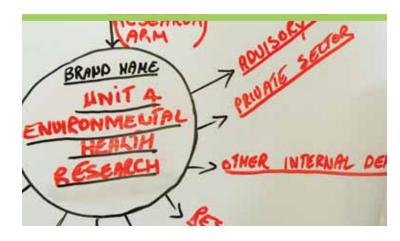
"In the face of the current HIV/Aids situation in South Africa and the increasing occurrence of drug resistant microbes, researching the traditional indigenous knowledge of South African medicinal plants is interesting, rewarding and relevant."

**Ryno Freidberg**, former MTech biomedical technology student, an NMMU academic achiever. Ryno is involved in cancer research. Others are involved in TB research, specifically typing TB strains.

## Department of Environmental Health and Social Development Professions

Prevention is better than cure. This is the underlying philosophy driving this multifaceted department. HIV/Aids, clinical social work intervention, poverty, administration, laws, policies and psycho-social health are just some of the realities tackled in the social development professions programmes while water quality management, food and meat hygiene and environmental health impact assessments are important areas within the environmental health programmes.

This department offers study opportunities that will lead to registration with professional bodies, such as the Health Professions Council of South Africa and the Council for Social Service Professionals.



#### PROGRAMMES

Qualification	Programme structure		Study option	
Qualification	Research	Coursework	Full-time	Part-time
Social Work programmes:				
BAHonsSw (Social Work)		•	٠	
BAHonsSw (Social Work) — Probation Work		•	•	•
MASW – Social Work	٠			
MASW – Clinical Social Work		•	•	•
MASW – Social Development and Planning		•	•	•
DPhil – Social Development Professions	•			
Environmental Health programm	nes:			
MTech (Environmental Health)	•			•
DTech (Environmental Health)	•		•	•

#### INTER-FACULTY PROGRAMMES

In line with the faculty's relevant and multi-disciplinary approach, modules in business management, labour relations, public administration, human resources management, research methodology and information technology are included in the following programmes:

Qualification	Programm	e structure	Study option	
Qualification	Research	Coursework	Full-time	Part-time
PGDip (H&W Mgment) – Health and Welfare Management		•		•
MA (HහW Mgment) – Health and Welfare Management	٠	•		•

#### ADMISSION

Programme type	Requirements		
Honours degrees	A relevant bachelor's degree, professional registration and appropriate practical experience and level of competence as stipulated by the department		
Postgraduate diplomas	Honours degree or equivalent qualification		
Master's degrees	Honours degree, four-year bachelor's or equivalent qualification in the appropriate field of tuition for master's programmes. BTech degree or equivalent qualification in a related field for MTech programmes.		
Doctoral degrees	Master's degree or equivalent in the appropriate field		
Please consult the faculty officer or visit www.nmmu.ac.za/health for additional requirements as stipulated by the department			



"The Government adopted the World Health Organisation's philosophy of primary health care that attempts to change the emphasis from curative to preventative health care. Within this context, the profession of environmental health plays a leading role, as it is predominantly preventative in nature."

- Dr Henri Maarschalk, Principal lecturer

### Stay connected:

Environmental Health and Social Development Professions Charles Qoto • Tel: 041 504 3348 / 3523 E-mail: charles.qoto@nmmu.ac.za

Health and Welfare Management Danica du Plessis • Tel: 041 504 2662 E-mail: danica.duplessis@nmmu.ac.za



"You should seek and create opportunities to practically apply whatever you learn."

 Solomon Mudege, of Zimbabwe, who was awarded the Sepp Blatter scholarship worth R12 000 to undertake research specifically focusing on soccer and now works for FIFA.

## Department of Human Movement Science

This pro-active, internationally-recognised department offers students the opportunity of specialising in biokinetics, recreation, sport management and sport science in ideal relaxing surroundings. Sports facilities abound at NMMU, with its international athletics stadium and soccer, cricket, hockey and rugby fields.

The department has its own Biokinetics and Sports Science Unit, and it houses the province's Academy of Sport with its High Performance Unit. It's here – and out in the field – that theory meets practice to give these postgraduate students a head start when it comes to all-round capabilities in the sports environment. This ability, along with the department's renowned research output, means NMMU sports students are snapped up by employees and work around the globe.

The department is headed by **Prof Rosa du Randt**, who is assisted by a highly-qualified and passionate staff whose research is internationally praised. Eye-tracking, talent identification, cricket, sports injuries and neck research are some of the areas studied by the department, which works collaboratively with several countries, including Germany, Australia and the United Kingdom.



#### ADMISSION

Programme type	Requirements		
Honours degrees	A three-year bachelor's degree with Human Movement Science as major or any equivalent qualification recognised by Senate.		
Master's degrees	A relevant honour's degree or equivalent that has been approved by Senate.		
Doctoral degrees	Master's degree or equivalent in the appropriate field.		
Please consult the faculty officer or visit www.nmmu.ac.za/health for additional requirements as stipulated by the department			

#### PROGRAMMES

Qualification	Programme structure		Study option	
Qualification	Research	Coursework	Full-time	Part-time
BAHons/BScHons (HMS) – Human Movement Science (General Curriculum)		•	•	•
BAHons (HMS) – Human Movement Science (Biokinetics)		•	•	
BAHons (HMS) – Human Movement Science (Sport Science)		•	٠	
MA (HMS) – Human Movement Science	٠			
MA (HMS) – Human Movement Science (Biokinetics)		•		
MA (HMS) – Human Movement Science (Sport Science)		•		
DPhil (HMS) – Human Movement Science (Research)	•			

#### **DID YOU KNOW?**

• NMMU's Department of Human Movement Science was the fifth institution to qualify for the training of biokineticists. Biokineticists are exercise specialists who increase a person's physical condition and quality of life by means of physical assessment and the prescription of health exercise habits. NMMU's first biokineticists graduated in 1991.

## Stay connected:

Head of Department: Prof Rosa du Randt Tel: 041 504 2499 / 2497 Fax: 041 504 2770 E-mail: rosa.durandt@nmmu.ac.za Website: www.nmmu.ac.za/health www.nmmu.ac.za/hms



## The power of exercise

After successfully completing the IronMan three times – and finishing in the top 10 in her age group – it's no surprise that biokineticist Dr Maryna Baard is passionate about research relating to exercise.

In fact, this Human Movement Science lecturer and her postgraduate students conducted one of the first studies – both nationally and internationally – on power plates."Since whole body vibration (WBV) came on the market around 10 years ago, it has received a lot of negative press. We set out to determine its health benefits, especially among obese women, and we also looked at how WBV affects lower back pain."

While most of the existing literature focuses on industrialised WBV – such as the effects of using an industrial drill – and typically outlines the negatives, Dr Baard and her students found WBV as effective or even better than conventional floor exercises, when the prescription and supervision of the exercise programme is in the hands of a professional health practitioner.

Other studies – which Dr Baard hopes to research further in collaboration with other departments, such as pharmacology and physiology – include the impact of WBV on asthma and diabetes. She has also researched the healing effects of hydrotherapy on various diseases, including osteoporosis and diabetes, developed exercises for people suffering from Parkinson's disease, and has designed a web-based wellness questionnaire for companies to determine their wellness profile.

The department utilises cutting edge, high-tech equipment for its research, including a biodex machine, which assesses balance and neuro-muscular control. "We are also the only university in the Southern hemisphere with a RS international foot scanner, which is currently being used for research on long distance runners – measuring the changes in foot pressure after endurance events." Conducting studies around the IronMan is Dr Baard's "research dream".

Connect to: Dr Maryna Baard E-mail: maryna.baard@nmmu.ac.za



#### **Fast-tracking sportsmen**

South Africa is home to a wealth of sporting talent – identifying, nurturing and fast-tracking that talent is a research goal of the university's Human Movement Sciences (HMS) Department.

Heading the ongoing study is department head **Prof Rosa du Randt**, whose efforts in analysing the South African situation, facilitated the establishment of an academy structure for sport development nationally. The Eastern Cape Academy of Sport, for example, is housed in the department.

With the structure concept complete, the department is now geared to use its "indicators of potential" research to identify up-and-coming young black female sprinters.

"It's an exciting prospect. We have been tasked with fast-tracking our athletes in an ongoing programme, starting from high school," says Prof Du Randt, who is a member of the Sport Research Commission of the Department of Sport and Recreation South Africa (SRSA) and also heads the university's research ethics panel.

# Short learning programme in Sport Management

#### Soccer World Cup and beyond

A postgraduate short learning programme in Sport Management to train sport managers, is offered by NMMU and the International Centre for Sport Studies (CIES) at Neuchatel University in Switzerland. The FIFA-backed skills-based development programme, focuses on management, marketing, legal aspects specific to sport, sport communication, financial management and sport event management.

NMMU is the only university in South Africa contracted to offer this programme, using contact education as the mode of delivery.

Connect to: Programme coordinator: Vernon Oosthuizen Tel: 041 504 3713 / 3714 • E-mail: vernon.oosthuizen@nmmu.ac.za Website: www.nmmu.ac.za/health

#### Services and resources

The department of Human Movement Science offers a wide range of resources in the sports industry. Its Biokinetics and Sport Science Unit is open to the public, while its Sports Bureau (situated at the NMMU's Indoor Centre) and academic staff also offer services in their fields of expertise.

The department's reputation is such that provincial and national teams increasingly making use of their expertise.

Connect to: Prof Rosa du Randt Tel: 041 504 2497



"Everything abouth research excites me. Especially beign creative and innovative in searching for new knowledge and ways of doing things."

- **Dr Essie Ricks**, Programme Manager for Community Nursing Science

## Stay connected:

Head of Department: Prof Dalena van Rooyen Tel: 041 504 2122 / 2960 E-mail: dalena.vanrooyen@nmmu.ac.za

## **Department of Nursing Science**

The "healing hands" of the faculty – the Department of Nursing Science - is actively involved in serving society thanks to a wealth of postgraduate programmes geared to meet the ever-divergent health care needs of today – in Africa and beyond.

Be it HIV/Aids, midwifery or psychiatric nursing, the department's programmes are recognised for their relevance and high standard. Short learning courses and career advancement programmes for those already working in the field, are run alongside the traditional advanced courses in medical and surgical nursing, midwifery, neonatal nursing, psychiatric nursing, primary health care and nursing education.

Research opportunities abound, along with access to bursaries and/or loans since the need for highly-qualified nursing staff world-wide continues to grow. Our students are hired even before they have finished their postgraduate qualification.

The department continues to be pro-active in seeking partnerships, both locally and internationally, to ensure its students are exceptionally well-prepared for the challenges facing them in health care today.

The staff is recognised for their commitment to excellence, passion for the profession and care for students.

#### PROGRAMMES

Qualification	Programm	e structure	Study option	
Qualification	Research	Coursework	Full-time	Part-time
BCurHons (Advanced General Nursing Science) – Operating Theatre Nursing Science		•	•	•
BCurHons – Advanced Midwifery and Neonatal Nursing Science		•	•	•
BCurHons – Advanced Psychiatric Nursing Science		•	٠	•
BCurHons – Advanced Primary Health Care		•	•	•
MCur (Advanced General Nursing Science)	٠	٠	٠	٠
MCur (Advanced Primary Health Care)		•	٠	•
MCur (Advanced Clinical Midwifery and Neonatal Nursing Science		•	٠	•
MCur (Advanced Psychiatric Nursing Science)		•	٠	•
MCur (Advanced Nursing Education)				
MCur (Research)	٠		٠	•
DCur	•		•	•



#### CAREER ADVANCEMENT PROGRAMMES

*Note:* Although these programmes are not regarded as postgraduate qualifications per se, they have been included based on their relevance to the profession.

Qualification	Programm	e structure	Study option	
Quanneation	Research	Coursework	Full-time	Part-time
DipCNS – Community Nursing Science		•	•	•
DipNA – Nursing Administration		•	•	•
DipNE – Nursing Education		•	٠	•
DipNNS – Nephrology Nursing Science		•		•
BCur (I et A) – Nursing Administration and Education		•	٠	•

"If it were not for my supervisors I would never have finished my degree! They were so supportive and inspiring. After every meeting with them I walked away feeling inspired and ready to take on the challenges. They were so professional. I will always be grateful to them for their continuous motivation, help and support."

 Maggie Williams, former matron of the House of Resurrection Aids Haven in Port Elizabeth, who obtained her master's in 2007 and now works for the department.

#### ADMISSION

Programme type	Requirements
Diplomas	Senior Certificate or an equivalent. Registration as a nurse in the related field with the South African Nursing Council.
BCur (I et Al) (Nursing Administration) and Education	Matriculation exemption/endorsement certificate. Registration as a professional nurse with the South African Nursing Council.
Honours degrees	A four-year diploma in the relevant field. Candidates must occupy an approved post and possess appropriate experience*
Master's degrees (coursework)	A four-year BCur degree with a mark of at least 60% in the major subjects, or a qualification deemed by Senate to be equivalent.
Master's degrees (research)	Candidates must occupy an approved post and possess appropriate experience. A mark of 60% for the BCur Honours or qualification deemed
2	by Senate to be equivalent.
Doctoral degrees	Master's degree or equivalent in the appropriate field
Please consult the faculty requirements as stipulate	y officer or visit www.nmmu.ac.za/health for additional ed by the Department

\* Registration as a nurse in the related field with the South African Nursing Council.



## It's all about giving

It's all about giving for **Prof Dalena van Rooyen**. Giving of her time; her knowledge and experience to those in need because that's what the nursing fraternity does – it cares.

So those registering for any one of the postgraduate nursing programmes at NMMU, can rest assured they're in good hands with Prof Van Rooyen as head of department."We constantly need to see what we can do to contribute to society. That's what caring people do," says Dalena, who walks the talk in her efforts to grow the department and its students.

Links with overseas institutions have been established, collaborative research initiated, relevant programmes introduced, and increased community outreach nursing projects in conjunction with local government begun.

This is one pro-active department ably led by the woman who excelled as a student. Following in her mother's Florence Nightingale footsteps, Prof Van Rooyen completed her nursing studies in the self-same department she now heads. Her research is rich and varied - HIV/Aids, diabetes, measuring instruments to assess clinical competence and evidence-based practices are some of the areas she has investigated. Time and again she has been recognised for her efforts with several awards, including the university's Top New Researcher in 2004.

She has authored and co-authored dozens of publications, presented and co-presented papers the world-over and served on umpteen professional bodies. She is editor of the South African textbook Foundations of Nursing Practice and is leading a team of specialist contributors in adapting an existing British textbook for the local market. And in between, she's nurtured 16 doctoral and 60 honours and master's students to success. By her own admission, "life is not dull". Challenging, yes, but dull, never.

### **Diabetes Mellitus Project**

An interdisciplinary study group focusing on the design of teaching-learning material for registered nurses as well as community health workers caring for diabetics is underway at NMMU.

Diabetic patients need to adequately manage their disease in order to minimise the complications associated with diabetes. By developing a framework for culturally appropriate education for the management of a diabetic patient by registered nurses, the care of patients suffering from this escalating disease in South Africa could be better addressed.

"Being a postgraduate student here gives me great pleasure. Whenever I walk into the Nursing Science Department, amazing smiles and help are there. This means a lot to someone who misses home. I have really benefited from my studies because of their expertise."

- Negat Woldehawariat, postgraduate student from Addis Ababa, Ethiopia

#### **DID YOU KNOW?**

• The Nursing Science Department's Dr Esmeralda Ricks, with BCur Honours student Velencial Benjamin completed a study for a US-Based private company (AED-Satellife) marketing hand-held computing devices. It involved doing situational analysis to determine the knowledge needs of professional nurses working in primary health care clinics. The computing device was then utilised by the nurses and an evaluation of the success of the project was completed.



Prof Pieter Milne was awarded the FARMOVS prize in Pharmacology and Drug Development by the South African Academy of Sciences and Arts, the country's highest award for Pharmacology and Drug Development.

## Stay connected:

**Head of Department:** Prof Pieter Milne Tel: 041 504 2128 / 2769 Fax: 041 504 2744 E-mail: pharmacy@nmmu.ac.za Website: www.nmmu.ac.za/pharmacy

## **Department of Pharmacy**

The Department of Pharmacy is ideally positioned to guide practising pharmacists through postgraduate studies with our highly-skilled staff, a renowned research ethic and extensive links with the pharmaceutical industry community and hospital pharmacy sectors of the profession both nationally and internationally.

Its people-centred programmes ensure that students interact with doctors, pharmacists and patients during their studies. This practical focus enables our students to meet the needs and expectations of the pharmacy profession and the community.

#### **RESEARCH AREAS**

- Cyclic peptides
- Innovative and new formulation and manufacturing studies
- Drug utilisation
- ▶ Rational drug use focusing on diabetes mellitus & HIV/Aids
- Role of pharmacists in provision of pharmaceutical care

#### PROGRAMMES

Qualification	Programm	e structure	Study option		
Quanneation	Research	Coursework	Full-time	Part-time	
MSc	plus practical work		•	٠	
MPharm (Pharmacy)	plus practical work		•	٠	
PhD	plus practical work		•	٠	

#### ADMISSION

Programme type	Requirements			
Master's degrees	The four-year BPharm degree with a pass mark of at least 60% in the relevant fourth-year subject area, namely pharmacology, pharmaceutics, pharmaceutical, chemistry or pharmacy practice			
Doctoral degrees	Master's degree or equivalent in the appropriate field			
Please consult the faculty officer or visit www.nmmu.ac.za/pharmacy for additional requirements as stipulated by the department				



## Cyclic Peptide Research Unit (CPRU)

The CPRU fosters collaboration between the biological sciences and pharmaceutical chemistry to allow a broader scope for research.

Collaborators from different South African institutions and industry focus research towards the structure and biological activity of cyclic peptides, a fascinating family of molecules that can function as antibiotics, toxins, ion-transport, regulators, proteinbuilding inhibitors, enzyme inhibitors and immunosuppressants.

The research team, from the departments of Pharmacy, Biochemistry and Microbiology, offers postgraduate students a wide range of research focus areas including:

- Development of synthetic dipeptides
- In vitro screening for tumour inhibition
- Pharmacokinetic parameters (gastrointestinal absorbtion, biometabolism and distribution) of prospective drugs using in vitro screening methods
- Antibacterial and antifungal screens
- Screening for cardiac activity
- Screening for ion-channel activity.

**Connect to: Director: Prof Pieter Milne** 

Tel: 041 504 2760 • E-mail: pieter.milne@nmmu.ac.za



## Monitoring Medicine Use in South Africa

Through her work in the under-researched area of medicine use in South Africa, **Prof Ilse Truter**, Director of NMMU's Drug Utilisation Research Unit (DURU), is hoping to detect and monitor patterns of medicine abuse and misuse and, in doing so, promote responsible medicine usage.

Prof Truter said most people had developed a casual attitude towards Western medicine, forgetting that it was a "chemical ingredient they are taking into their bodies, which will alter them in some way". Consequently, over-the-counter abuse and over- and under-prescription can easily go unnoticed – especially in countries like South Africa, where there are few established norms for drug use. To plug this gap, Prof Truter is developing accurate patterns of usage for a variety of medicines, including those that affect the central nervous system, among them painkillers, antidepressants, anxiolytics (anti-anxiety medicine), drugs prescribed for Attention-Deficit Hyperactivity Disorder (ADHD) and, most recently Alzheimer medication and medicine for Parkinson's disease.

"Alzheimer's disease is increasing worldwide. However, it is a condition for which there is a limited and very expensive spectrum of available medicines that are effective. Furthermore, more elderly people are often being prescribed anti-psychotic drugs, despite a number of warnings that this can lead to a higher mortality rate, especially when given to people with dementia."

Prof Truter, who holds doctoral degrees in both Business Management and Pharmacoepidemiology, is also conducting follow-up research on studies conducted by two of her postgraduate students some years back on the high usage of anti-depressants among children. "Again, there have been warnings worldwide about giving children anti-depressants. We want to see if these have made a difference on the prescription and use of these drugs for children." She said some research had shown that anti-depressant use by children can lead to an increase in suicidal tendencies.

## Drug Utilisation Research Unit (DURU)

The Drug Utilisation Research Unit (DURU) at NMMU has produced more than 48 refereed research articles, and delivered more than 300 local and international conference presentations. Several other publications are under way.

Drug utilisation research examines the marketing, distribution, prescription and use of medicine in society with special emphasis on the resulting medical, social and economic consequences which gives extensive multi-disciplinary research options for postgraduate students.

Currently, however, students are mainly engaged in projects focusing on central nervous system disorders such as anxiety and depression, Attention Deficit Hyperactivity Disorder (ADHD) and pain management, and the management aspects related to medicine prescribing and use in general.

Although research is academically focused, studies are practically orientated and the results are fed back to industry and the community.

Connect to: Director: Prof Ilse Truter Tel: 041 5042131 • E-mail: ilse.truter@nmmu.ac.za



"Prof Truter is a well-recognised figure in the drug utilisation research arena both nationally and internationally. I was fortunate to have her share this wealth of experience with me as the co-promoter of my PhD study."

 – Michelle Bellingan, Senior lecturer at the Faculty of Medicine, Health and Molecular Sciences at James Cook University, Northern Queensland, Australia



"Working with children means working with the future: To quote the poet Milton, 'Childhood shows the man, as morning shows the day."

> - **Prof Louise Stroud,** Psychology Head of Department

## Stay connected:

Head of Department: Prof Louise Stroud Tel: 041 504 2682 E-mail: psychology@nmmu.ac.za Website: www.nmmu.ac.za

Coordinator: Honours programmes Dr Zinsiswe Nqweni • Tel: 041 504 2230 E-mail: zinziswacornvia.nqweni@nmmu.ac.za

Coordinator: Master's programmes Dr Diane Elkonin • Tel: 041 504 2916 E-mail: diane.elkonin@nmmu.ac.za

Coordinator: Doctoral studies Departmental Secretary Yvonne Smith • Tel: 041 504 2354 E-mail: yvonne.smith@nmmu.ac.za

## Department of Psychology

The Department of Psychology offers a wide range of postgraduate studies which either provides training for individuals who want to development psychological knowledge for people-orientated careers, or professional knowledge that will lead to their official registration as counsellors or psychologists.

Apart from clinical and counselling psychology, the department offers, in collaboration with the Department of Human Movement Science, study opportunities in sports psychology.

Each master's student is expected to undertake an individual research project. This project forms the basis of a treatise which must be submitted in partial fulfillment of the requirements for the coursework master's degrees.

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quanneation	Research	Coursework	Full-time	Part-time
BAHons (Psychology) Programme 1 Aimed at those who do not necessarily want to pursue professional training		•	•	•
BAHons (Psychology) Programme 2 Aimed at those who want to qualify for application to register with the Professional Board of Psychology as a registered counsellor	•	plus internship &practical work	•	•
MA (Psych) – Psychology	•		•	•
MA (ClinPsych) – Clinical Psychology		plus internship &practical work	•	•
MA (CounsPysch) – Counselling Psychology		plus internship &practical work	•	•
DPhil (Psychology)	•		•	•



ADMISSION				
Programme type	Requirements			
Honours degrees	Relevant bachelor degree of which the course content and the candidate's level of achievement is deemed satisfactory by the department All candidates shall be subject to selection			
Master's degrees (coursework)	An honours degree or equivalent BPsych 4 <sup>th</sup> year in Psychology at a level considered satisfactory by the department Registration with the Professional Board for Psychology as students for a coursework master's All candidates shall be subject to selection Applicants for MEd (Educational Psychology) shall be admitted if they have passed Psychology III, have obtained a BEd plus one year teaching experience			
Master's degrees (research)	An honours degree in Psychology at a level considered satisfactory by the department			
Doctoral degrees	*Master's degree or equivalent in the appropriate field			
Please consult the faculty officer or visit www.nmmu.ac.za/health for additional requirements as stipulated by the department				

\* Subject to the availability of supervisor(s).



## The University Psychology Clinic (UCLIN)

UCLIN is an outpatient unit concerned with the assessment and treatment of children, adolescents and adults who are experiencing educational, emotional and/or behavioural difficulties.

Most referrals to UCLIN come from medical doctors, educational institutions and social workers.

It is staffed by our postgraduate psychology students as they strive for registration in clinical and counselling psychology. A similar service is offered at Missionvale Campus. **Connect to: 041 504 2330** 

#### Internships

During internships in clinical psychology, students will have experience of working at UCLIN, the Elizabeth Donkin Hospital (a psychiatric hospital), and other hospitals in the city as well as various mental health clinics in the area. Students in counselling psychology do their internship at UCLIN, the NMMU Student Counselling Centre, the Missionvale Campus Psychology Centre and Life Health Care.

#### **Research areas**

- Systems research (family and marital, social psychology), human ecosystems, personal and organisational stress, personal experience of mergers
- > Standardisation and development of psychological tests
- Lifespan career development
- Clinical health psychology
- Psychobiographical research
- The Griffiths Scales of Mental Development
- MMPI-2
- Development psychology
- Neuropsychology
- Cultural and cross-cultural psychology
- HIV/Aids
- Personal and professional development of psychologists
  - Therapeutic psychology

"The Phelophepa gives our students the ideal opportunity to experience community psychology in action. They gain practical experience in individual counselling and psychoeducational workshops, and are challenged to critically think about how to apply psychology theories within the South African context."

 Alida Sandison, national coordinator of psychology students on the Phelophepa train

## All aboard

Dozens of psychology postgraduate students at NMMU take their skills to the people aboard Phelophepa, the South African train that endeavours to meet the health needs of rural South Africans.

Every year our students bring psychology to communities who have little access to psychological services. Its travelling clinic, staffed by our caring postgrads and a resident psychologist, facilitate workshops and offer one-on-one, solution-focused counselling sessions. Students are excused from their studies and internships in order to render help during the two-week trip.





#### DID YOU KNOW?

• A school readiness test designed and standardised by this department many years ago has benefited thousands of children throughout the Eastern Cape. The test picks up developmental difficulties that may not have been identified earlier on.

## Defining tomorrow



## Voice for the poor

Ensuring that South Africa's constitution is as progressive in practice as it is on paper, especially when it comes to matters affecting the poor, is the main focus of law professor **Avinash Govindjee**.

"My research focuses on the poorest people in society. I try to use the law to argue for greater assistance to these people where the State is not acting reasonably," says Prof Govindjee, acting head of the Public Law Department and deputy head of the Labour and Social Security Law Unit.

He seeks to determine whether government policies in the area of social assistance are in alignment with the constitution. When they are not, he takes action to change this. For instance, he worked with the Port Elizabeth Justice Centre arguing for equal social grants for men and women at the age of 60, instead of men having to wait until they are 65, which government went on to implement in 2010.

Furthermore, he was involved in drafting proposed legislative amendments pertaining

to the introduction of community-based health insurance in South Africa. He has also contributed to projects aimed at redesigning the Unemployment Insurance Fund and pertaining to the introduction of an early return-to-work programme in cases of occupational injury and disease in South Africa.

Prof Govindjee, whose work has resulted in two university research awards and recognition from the National Research Foundation as a top grant recipient, has also been appointed a co-consultant to the South African Social Security Agency to facilitate the implementation of various social assistance policies.

In the future, this senior commissioner at the Commission for Conciliation, Mediation and Arbitration (CCMA) and mentor for the Mandela Rhodes Scholarship Programme is hoping to see more collaborative research – where academics like himself work hand-in-hand with economists, politicians and other universities – to make research "meaningful".

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## Faculty of Law Defining tomorrow

he Faculty of Law takes pride in its high quality education and training programmes aimed at developing legal professionals committed to the cause of justice. Apart from research opportunities, graduates may also develop specialist legal skills through coursework master's programmes in the fields of criminal justice, labour law and taxation.

### The faculty departments

- Department of Criminal and Procedural Law
- Department of Mercantile Law
- Department of Private Law
- Department of Public Law

### Serving the community

Staff and postgraduate students in the Faculty of Law are frequently involved in the world beyond the campus by sitting as assessors, writing legal opinions on instruction from attorneys, acting as legal consultants, presiding in the Small Claims Court and providing services to the community through the following:

- ▶ Labour and Social Security Unit
- Street Law Unit
- Institute for Sustainable Government and Development (ISGAD)
- School for Legal Practice
- Ubuntu Community Outreach Programme

The Labour and Security Unit provides quality training and research in labour law and social security law by means of short programmes and a contract research service.

#### Connect to: Prof Adriaan van der Walt Tel: 041 504 2199 • E-mail: javanderwalt@nmmu.ac.za

The Institute for Sustainable Government and Development (ISGAD) seeks solutions and offers assistance to government and others through a wide spectrum of initiatives including introducing systems, building capacity and improving access to justice. Postgraduates enjoy plenty of hands-on experience.

#### Connect to: Prof Hennie van As Tel: 041 504 1200 • E-mail: hennie.vanas@nmmu.ac.za



"It is imperative that we create teaching, learning and research outcomes that will serve the needs of industry and the community. The teaching of law needs to be practical and lived."

 Dean of the Faculty of Law Prof Vivienne Lawack-Davids

## Stay connected:

Faculty administration Tel: 041 504 2309/2588

Faculty website www.nmmu.ac.za/law

Get connected: Ms Marieta Fourie Tel: 041 504 2588 E-mail: marieta.fourie@nmmu.ac.za

"The transformation of justice in South Africa has some links with the transformation of the legal profession and legal scholarship. In partnership with law schools we have already transformed the curriculum of the basic law degree to bring it in line with modern best practices."

- Menzi Simelane, National Director of National Prosecuting Authority



"With my research in labour law and unfair discrimination, I seek to make a small contribution to achieving equity and equality in the workplace."

- **Prof Adriaan van der Walt**, 2010 Faculty Researcher of the Year

"Apart from a quality education, the university provides exposure to a rich culture and diversity through interaction with students from all over the world."

 – Sofia Rajab, former chairperson of the Law Students Society

## Street Law Unit

The main aim of the Street Law Programme is to introduce legal, human rights and democracy education to various sectors within the Eastern Cape community. Street Law is designed to provide a practical understanding of the law, human rights and aims to inform people about the laws that affect them in their everyday life. Street Law is a practical course which involves group discussions, problem-solving, critical thinking, debates, mock trials and excursions. The Street Law Programme is presented to school learners, teachers, community and youth organisations, church groups, children in places of safety, prisoners.

#### Connect to: Ms Lindi Coetzee, Programme Director Tel: 041 504 2077 • E-mail: lindi.coetzee@nmmu.ac.za

One of ISGAD's centres is the Law Clinic, which is a fully-fledged Legal Aid Clinic providing free legal services to needy people and also offers training opportunities for law students. The clinic promotes access to justice for all and fosters a commitment in students to build a society based on democratic values, social justice and fundamental human rights. The clinic provides an opportunity for many graduates to do their articles.

#### Connect to: Charlene Pieterse Tel: 041 504 1273 • E-mail: charlene.pieterse@nmmu.ac.za

The School for Legal Practice, one of nine centres in the country, renders practical legal training at postgraduate level. The school provides law graduates with the opportunity to acquire and develop practical legal skills enabling them to make the transition from academic learning to practicing law.

Connect to: Anita Strydom Tel: 041 504 2264 • E-mail: anita.strydom@nmmu.ac.za

## Labour Law

This programme aims to develop specialist labour law expertise in line with significant advances and changes in the field in recent years. NMMU is acknowledged for its specialist expertise in labour law and labour relations and has produced dozens of top postgraduates over the years. The programme is presented in a semi-distance format, in which home studying is complemented by a week-long contact session at NMMU for each module. Students also complete a treatise.

## **Criminal Justice**

This programme provides the opportunity to develop specialist skills in criminal justice, taking into account recent theoretical and doctrinal developments in South African and other jurisdictions. Particular attention is paid to the effect of the introduction of the Bill of Rights on existing rules of South African law. The same presentation methods for labour law are used for criminal justice.



## Ubuntu Community Outreach Programme

The Ubuntu Community Outreach programme is a faculty initiative which undertakes to serve the poor. Its main activity is the Ubuntu Children Project which is run at Cedarberg Road Primary School in Booysens Park every Saturday morning. Our student volunteers go to the school for about two hours to play educational games with the children and introduce them to basic human rights training.

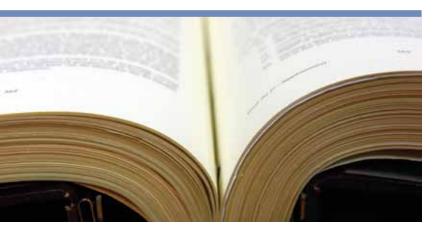
#### **Connect to: Prof Andre Mukheibir**

#### Tel: 041 504 2593 • E-mail: andrè.mukheibir@nmmu.ac.za

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quaincation	Research	Coursework	Full-time	Part-time
Master's degrees				
LLM (Research)	٠		•	•
LLM (General Coursework Programme)		•		•
LLM (Criminal Justice)		•		•
LLM (Labour Law)		•		•
LLM (Taxation)		•		•
LLM (Private Law)	•		•	•
LLM (Public Law)	•		•	•
LLM (Mercantile Law)	•		•	•
LLD (Research)	•		•	•
LLD (Mercantile Law)	٠		•	•
LLD (Private Law)	•		•	•
LLD (Public Law)	•		•	•

Candidates who register for the general coursework programme or programmes in Criminal Justice or Labour Law and who do not comply with the research component by failing to complete the treatise, may be awarded a Postgraduate Diploma in Law, endorsed with the specific field of study, if applicable. This Postgraduate Diploma in Law is a recognised exit qualification of the master's degree.





#### **ADMISSION**

Programme type	Requirements
Master's degree (LLM)	LLB degree with an average mark of at least 60% or equivalent or a level of competence, approved by Senate, which is adequate for the purpose of postgraduate studies in Law
Doctoral degree (LLD)	LLM degree with an average mark of at least 60% or equivalent or a level of competence, approved by Senate, which is adequate for the purpose of postgraduate studies in Law

Please consult the faculty officer or visit www.nmmu.ac.za/law for additional requirements as stipulated by the department

## Expert in tourism law

Tourism law is the speciality of **Prof Patrick Vrancken**. Currently he is one of a few academics nationally focusing on this subject in South Africa, making this a speciality research area of NMMU.

"Many stakeholders in the industry are operating without being fully aware of the legal implications of their actions," says Prof Vrancken.

His ground-breaking research aims to develop a body of law for effective tourism law in South Africa that will assist both stakeholders and the public at large.

"People work hard for their holidays. The last thing they want is to be involved in litigation."

Prof Vrancken's expertise, however, stretches well beyond South Africa and Africa as he works with various other international tourism and academics bodies, such as the European Community Studies Association of Southern Africa, Napier University in Edinburgh, Scotland and the International Association of Scientific Experts in Tourism.

"Though the crime rate is due to problems in the enforcement of the law, the law itself does not provide adequate assistance to recovering victims."

 Dr John von Bonde, Law lecturer, whose research into the legal position of victims of crime proposes changes to the law that will help them "Discrimination and injustice resulting from non-recognition of Muslim marriages is the driving force behind my research."

 Adv Razaana Denson, Emerging Researcher of the Year 2010



- Prof Adriaan van der Walt is the editor of the accredited law journal *Obiter*.
- The Faculty is hosting the Third Annual Private Law and Social Justice conference in August 2011.



## Discovering tomorrow



## Uncovering home grown hibernation habits

Africa's first black evolutionary physiologist **Dr Kwezi Mzilikazi** is making fascinating discoveries about small mammal hibernation in South Africa – a phenomenon typically associated with icy northern hemisphere conditions.

Her pioneering research has put her on the global science map, and saw her named among the Mail and Guardian's top 300 young South Africans for 2009. In 2010, she was second runner-up in the Department of Science and Technology's Women in Science Awards, in the category "Distinguished Young Woman Scientist in the Life Sciences". Dr Mzilikazi and her physiology student research group have found that woodland dormice in the Great Fish River area lower their body temperature to as little as 2°C to survive the worst of winter. The tiny dormice go into a state of torpidity, which can last for days. "This is groundbreaking as Africa has always been thought of as warm. In the northern hemisphere, Arctic ground squirrels have been known to decrease their body temperature to -3°C, but this phenomenon is unexpected in Africa." One of Dr Mzilikazi's students discovered a similar response in bush babies in the Limpopo area. The ability to study these animals in their natural habitat has been made possible by new technological innovations. "With the availability of miniature data loggers (tiny data-collecting buttons, inserted into the animals' bodies), we are able to work with these animals in their natural habitats."

The zoology senior lecturer is also concerned about how the advent of global warming will affect hibernation patterns, and is carrying out experiments to monitor how temperature increases affect animals.

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## **Faculty of Science**

Discovering tomorrow

#### nter the exciting and innovative world of science to hunt down breakthroughs in new products, processes, technologies, conservation and sustainable development in protecting and improving our world for coming generations.

The Faculty of Science is at the cutting-edge of research, technology and innovation, working with industry, government and society to create and improve products and processes, and committed to making sure our natural environment benefits the future.

Our postgraduate programmes including the Professional Science Master's programme, cited by the New York Times as the "hottest new degree on the globe", invite to you be part of discovering tomorrow.

The faculty is privy to state-of-the-art equipment, laboratories and an extensive natural research playground in terms of its location on the coast and within an hour's drive of six of the world's seven biomes. Furthermore, it has established many partnerships with industry, government and civic organisations to give postgraduates vital hands-on opportunities to put their textbook brilliance into practice.

## Schools and departments

- School of Biomolecular and Chemical Sciences
   Department of Biochemistry and Microbiology
   Department of Chemistry
   Department of Textile Science
   Institute for Chemical Technology and Downstream Chemical Technology
   Station (InnoVenton/DCTS)
- School of Computer Science, Mathematics, Physics and Statistics Department of Computing Science and Information Systems Department of Mathematics and Applied Mathematics Department of Physics Department of Statistics Centre for Energy Research Telkom Centre of Excellence
- School of Environmental Sciences
   Department of Agriculture and Game Ranch Management
   Department of Botany
   Department of Geosciences (Geography & Geology)
   Department of Zoology
   Centre of African Conservation Ecology
   Unit for Integrated Environmental and Coastal Management



"The Science Faculty is involved in many exciting ground-breaking research projects that will have significant benefit for our region, in the fields of energy, environmental conservation, industrial processes and other strategically important applications."

- Prof Andrew Leitch, Faculty of Science Dean

## Stay connected:

Faculty administration Tel: 041 504 2268 / 9922

Faculty website www.nmmu.ac.za/science

General information Tel: 041 504 2162 E-mail: postgrad@nmmu.ac.za

*"Half of the international postgraduates at NMMU are in the Science Faculty. Many are from other African countries like Namibia, Botswana, Kenya and Uganda."* 

## Stay connected:

Director: Prof Cedric McCleland Tel: 041 504 2607 E-mail: cedric.mccleland@nmmu.ac.za

Department of Biochemistry and Microbiology Head of Department: Prof Ryno Naudé Tel: 041 504 2439 E-mail: ryno.naudé@nmmu.ac.za

Department of Chemistry Head of Department: Prof Tommy Gerber Tel: 041 504 2286 E-mail: tommy.gerber@nmmu.ac.za

Department of Textile Science Head of Department: Prof Lawrance Hunter Tel: 041 504 3281 E-mail: lawrance.hunter@nmmu.ac.za

Institute for Chemical Technology and Downstream Chemical Technology Station (InnoVenton/DTS) Director: Prof Ben Zeelie Tel: 041 504 3281 E-mail: ben.zeelie@nmmu.ac.za

## School of Biomolecular and Chemical Sciences

## **Department of Biochemistry and Microbiology**

This department provides an integrated facility for training and research in the biomolecular field, with applications in medicine, agriculture and biotechnology. The synthesis of these fields into a single department creates fertile ground for exciting new developments in basic biology and its application to the needs of communities.

#### **RESEARCH AREAS**

- Ostrich protein structure
- Antibody receptors
- Medicinal plants
- Fungal plant pathogens and mycotoxin
- Diabetes
- Cyanobacterial research
- Epidemiology and antibiotic resistance (respiratory, genital pathogens)

## **Department of Chemistry**

This department has established a proud reputation for its research and graduates in industrial and academic circles alike. Postgraduate study opportunities exist in the major fields of organic, inorganic, analytical, physical/polymer chemistry. The department houses various centres that provide research, product and process development, support services, training and consulting activities to the chemical industry.

#### **RESEARCH AREAS**

- Green chemistry
- Industrial catalysis
  - Connect to: Prof Ben Zeelie Tel 041 504 3281 • E-mail: ben. zeelie@nmmu.ac.za
- Industrial electrochemistry
   Connect to: Dr Peter Loyson
   Tel 041 504 2147 E-mai: peter.loyson@nmmu.ac.za
- Organometallic chemistry
   Connect to: Prof Tommy Gerber
   Tel 041 504 4285 E-mail: thomas.gerber@nmmu.ac.za



## **Department of Textile Science**

NMMU has the only facility in South Africa for postgraduate studies in textile and clothing science, offering students the opportunity to obtain by research an MSc and/ or PhD in this field.

The fibre and textile competence area of the Materials Science and Manufacturing Operating Unit of the CSIR forms the backbone of this department. The department's highly qualified staff work with the latest equipment and undertake various research.

#### DID YOU KNOW?

- NMMU has its own micro-brewery thanks to an initiative with South African Breweries to ensure the university produces students well-equipped to work in the brewing industry.
- The Research Unit for Platinum Group Chemistry attracts considerable funding from industry to support ongoing research in the use of the platinum for anti-cancer treatment.



## On to a winning formula

With the global market getting more and more competitive, companies have to develop better, quicker, "greener" products. In the past, the search for new and improved ideas, technologies and materials usually began and ended overseas, at great expense.

However, NMMU's internationally-recognised Institute for Chemical Technology, InnoVenton, is changing this trend by harnessing home-grown talent through the country's first BSc Honours degree in Formulation Science. Here, students learn how to formulate new chemical products, which may be better suited to a South African environment and the country's abundant chemical and natural resources.

The course teaches the basic scientific principles behind the blending and mixing of products, and students have to come up with their own commercially viable product. A number of new, exciting and highly competitive exportable products are already heading for commercialisation, firmly putting South Africa on the innovation map.

#### PROGRAMMES

Qualification	Programn	Programme structure		option
Quanneation	Research	Coursework	Full-time	Part-time
BScHons (Biochemistry)			•	•
BScHons (Chemistry) – Physical, Organic or Inorganic Chemistry)			٠	•
BScHons (Formulation Science)			•	
BScHons (Microbiology)			•	•
MSc (Biochemistry)	•		•	•
MSc (Chemistry)	•		•	•
MSc (Microbiology)	•		•	•
MSc (Textile Science)	•		•	•
MTech (Chemistry)	•		•	•
MTech (Chemistry) - Product හ Process Development			•	•
PhD (Biochemistry)	•		•	•
PhD (Chemistry)	•		•	•
PhD (Microbiology)	•		•	•
PhD (Textile Science)	•		•	•
DTech (Chemistry)	•		•	•

"My biggest drive and dream is to help our students discover the inventor in themselves, and to steer each one on a voyage of discovery, guided their own private chart into a world that is all gates, all opportunities."

 Prof Ben Zeelie, director of InnoVenton, NMMU's internationally-recognised Institute for Chemical Technology.

#### ADMISSION

Programme type	Requirements	
Honours degrees	A relevant bachelor's degree with an acceptable level of competence attained or equivalent approved by Senate Candidates should have passed a subject at third-year level before proceeding with the honours degree programme in that subject Applicants for the BScHons in Formulation Science must have obtained a 360 credit qualification at NQF level 6 with majors in an allied science (biology, chemistry, physics, biochemistry, or pharmacy) or chemical engineering	
Master's degrees	A relevant bachelor's honours degree or equivalent approved by Senate	
Doctoral degrees	A relevant master's degree or equivalent approved by Senate	
Please consult the faculty officer or visit www.nmmu.ac.za/science for additional requirements as stipulated by the department		

"I chose to study chemistry at NMMU because research is centred around industry and not around academic research only. Industry and business is where my interest lay."

 Dr Eric Hoffman, a DTech graduate who works for a leading supplier of metal cutting tool and technology systems.



"Our research in environmental information systems and sustainability reporting is cutting-edge when it comes to helping companies make sound environmental, economic and financial decisions."

> – **Jean Greyling**, Head Of Department, Computing Sciences

## Stay connected:

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Department of Computing Sciences Head of Department: Prof Jean Greyling Tel: 041 504 2323/2247 E-mail:jean.greyling@nmmu.ac.za

Department of Mathematics and Applied Mathematics Head of Department: Prof Eugene Straeuli Tel: 041 504 2305 E-mail: eugene.straeuli@nmmu.ac.za

## School of Computer Science, Mathematics, Physics and Statistics

## **Department of Computing Sciences**

The Department of Computer Science & Information Systems and is home to several leading-edge research projects in the fields of computer science education, e-commerce, human-computer interaction, information visualisation, intelligent user interfaces, and mobile computing.

This department also hosts an industry-funded Centre of Excellence in Distributed Multimedia Applications, with outstanding research facilities.

## Telkom Centre of Excellence

The Centre of Excellence (CoE) programme was developed by Telkom SA to promote research in various aspects of telecommunications. Currently, NMMU's CoE consists of three units:

- The Distributed Multimedia Applications (DMA) Unit in the Department of Computing Sciences
- The Optical Fibre Research (OFR) Unit in the Department of Physics
- The Photovoltaics (PV) Unit in the Department of Physics
- These units are sponsored by various communications companies and research institutions which allows for the purchase of high-tech equipment for postgraduate studies.

#### Connect to: Prof Janet Wesson Tel 041 504 2323 • E-mail: janet.wesson@nmmu.ac.za

#### DID YOU KNOW?

- Cutting edge research equipment in the department includes a Usability Laboratory, Eye Tracking equipment, a large multi-touch surface, virtual reality equipment and Khepera robot
- The department currently has seven staff members with PhD qualifications
- Students and staff from the department won the SAICSIT awards for Best Research Paper in 2009 for research on evolutionary robotics, as well as the Best Research paper in 2010 for research on sensor-based mobile interaction techniques
- Annually staff and students present around 30 papers at various national and international research conferences



## Interaction design research

Making computers ever easier to use is the driving force behind the research of Human-Computer Interaction (HCI) expert **Prof Janet Wesson**.

"Hopefully my research will contribute towards making interacting with computers a satisfying, rather than a frustrating experience," says the woman who heads the university's Telkom Centre of Excellence in Distributed Multimedia.

Her research is concerned with designing more usable computer systems and has been recognised and rewarded by means of awards and prestigious positions for Prof Wesson, both locally and overseas. She is South Africa's national representative on IFIP TC.13 Technical Committee on Human-Computer Interaction, vice-chair of the same international organisation and a THRIP grant-holder since 2003. She has also been a THRIP Excellence Awards finalist.

She regularly presents her findings at international conferences, including the SAP International Research Forum in Germany where she has been the only South African researcher.

During her long association with NMMU where she is also head of the Department of Computer Science and Information Systems, the NRF C-rated researcher has supervised more than 60 postgraduates, from honours to doctoral level.

"I love the combination of computing and people. It's what motivates me."



## **Department of Mathematics and Applied Mathematics**

This department offers postgraduate study and research opportunities in Mathematics and Applied Mathematics. The honours programmes offer focus areas in Pure Mathematics or Computational Mathematics.

FirstRand Foundation in Maths Education

in the Faculty of Science.

#### RESEARCH AREAS

- Modern algebra
- Technology in mathematics education
- Computational mechanics
- Heat and mass transfer
- Mathematical ecology



**Department of Physics** 

This department offers postgraduates a vast selection of areas of specialisation.

#### **RESEARCH AREAS**

- Optical fibre characterisation
- ▶ Electron microscopy and nanoscience
- Photovoltaics
- Semiconductor materials and nanostructures
- Materials characterisation.

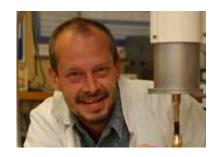
The Optical Fibre Research (OFR) Unit and the Photovoltaics (PV) Unit is housed in this department. The OFR unit's main goal is to study the optical characteristics of optical fibres and cables in high speed telecommunication networks, with emphasis placed on the assessment of polarisation mode dispersion (PMD). The (PV) unit's research activities focus on a wide range of topics, including PV materials and defect studies, device physics, solar cell and PV module characterisation and systems evaluation. The unit's facilities include a Photovoltaic Outdoor Research Facility (ORF) that is used to conduct research on PV modules exposed to environmental conditions.

"NMMU provided a great educational base and set of opportunities from which to launch my professional career and achieve in personal endeavours."

 BScHons (Computer Science and Information Systems) and Microscroft Firefly Software Design Competition winner Nicholas Goossens who works in Cape Town as a systems analyst

#### DID YOU KNOW?

- The electronic, pharmaceutical and optical communication industries will all benefit from a new R6m reactor, known as MOVPE (Metalorganic Vapour Phase Epitaxial) to undertake research on structures of a few nanometres.
- NMMU actively seeks postgraduates to join a highly-skilled research group in the Centre for High Resolution Transmission Electron Microscopy (HRTEM) to assist with nanoscience research projects. The Centre for HRTEM provides a broad community of SA scientists and students with a full range of state-of-the-art electron microscopes, worth more than R90 million, needed for nanoscale materials research. The Centre has the only atomic resolution TEM on the African continent.
- Postgraduate students from the department annually win awards at national conferences, and are expected to attend at least one overseas conference to present their research.



"We're working on devices in the infra-red range which could be used in missile tracking devices. I believe our work is of an international standard – it is certainly cutting-edge in South Africa."

- Prof Reinhardt Botha, Chair in Nanophotonics

#### DID YOU KNOW?

• A comprehensive mathematics development programme sponsored by Sasol and VWSA is housed in the Department of Mathematics and Applied Mathematics.

### Stay connected:

**Department of Physics** Head of Department: Prof Japie Engelbrecht Tel: 041 504 2186 E-mail: japie.engelbrecht@nmmu.ac.za

# SA Research Chair in Nanophotonics

In line with a government initiative to address the critical shortage of research skills in South Africa, NMMU holds the SA Research Chair in Nanophotonics, focusing on the development of optoelectronic materials and structures on the nanometer scale.

While nanoscience is multidisciplinary, the chair focuses on the physics of semiconducting nanostructures for photonic applications. Postgraduate research in this field is encouraged.

Connect to: Prof JR Botha Tel: 041 504 2144 E-mail: reinhardt.botha@nmmu.ac.za

## Stay connected:

Department of Statistics Head of Department: Prof Igor Litvine Tel: 041 504 2764 E-mail: igor.litvine@nmmu.ac.za

## High resolution Transmission Electron Microscope Centre

NMMU is the country's leading academic institution in the field of nanoscience and electron microscopy, where materials are analysed at miniscule levels. The university's new High Resolution Transmission Electron Microscopy (HRTEM) Centre – which will house four state-of-the-art electron microscopes two of which can analyse materials right down to atomic level. It will be the most sophisticated and advanced electron microscopy centre in Africa once completed in mid-2011.

The R80m suite of microscopes can be used across a multitude of fields like synthetic fuels technology, nuclear energy reactor materials, diamond cutting and drilling tools, minerals, metal alloys used in the automotive industry and optical sensors and electronic devices. The centre – the realisation of a dream long-held by Prof Jan Neethling, one of South Africa's most experienced electron microscopists and a foremost researcher on a wide range of materials including those to be used in future high temperature nuclear reactors – has been designed to accommodate up to 24 MSc and PhD students specialising in nanoscience. Bursaries for postgraduate studies are provided by the National Research Foundation, Sasol and Element Six.



## **Department of Statistics**

This department offers a wide range of research and study opportunities. However, theory and methods of paired comparisons is an established area of research. Other recent academic investigations include the statistical analysis of sport-related issues.

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quanneation	Research	Coursework	Full-time	Part-time
BScHons / BAHons / BComHons (Computer Aided Learning) (CAL)		•	•	•
BScHons / BComHons (Computer Science & Applied Mathematics)		•	•	•
BScHons / BComHons (Information Systems)		•	•	•
BScHons (Mathematics)		•	•	•
BScHons (Applied Mathematics)		•	•	•
BScHons (Physics)		•	•	•
BScHons / BComHons (Mathematical Statistics)		•	•	•
MSc (Computer Aided Learning)	•	•	•	•
MSc / MCom (Computer Science & Information Systems)	٠	•	٠	•
MSc (Mathematics)	•	•	•	•
MSc (Physics)	•	•	•	•
MSc / MCom (Mathematical Statistics)	٠	•	•	•
PhD (Computer Science & Information Systems)	•		•	•
PhD (Mathematics)	•		•	•
PhD (Physics)	•		•	•
PhD (Mathematical Statistics)	•		•	•

#### ADMISSION

Programme type	Requirements		
Honours degrees	A relevant bachelor's degree with an acceptable level of competence attained or equivalent approved by Senate Candidates should have passed a subject at third-year level before proceeding with the honours degree programme in that subject		
Master's degrees	A relevant bachelor's honours degree or equivalent approved by Senate		
Doctoral degrees	A relevant master's degree or equivalent approved by Senate		
Please consult the faculty officer or visit www.nmmu.ac.za/science for additional requirements as stipulated by the department			

## School of Environmental Sciences

## Department of Agriculture and Game Ranch Management

This department offers postgraduate research opportunities on master's (MTech) and doctoral (DTech) levels in the fields of agricultural management and game ranch management, which have become particularly topical research areas, especially in the Eastern Cape where traditional farming is being increasingly replaced by game ranching ventures.

## **Department of Botany**

This department strives to maintain a high level of scientific excellence in botanical research with specific emphasis on the role of plants in the structure and functioning of terrestrial and marine (including estuarine) communities and ecosystems.

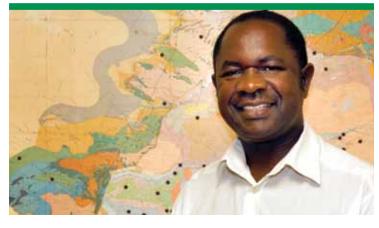
## **Department of Geosciences**

This department plays a significant role in the activities of the Integrated Environmental and Coastal Management Unit (IECM), particularly with regard to coastal processes, marine, estuarine and coastal dune deposits, groundwater, marine and estuarine pollution and environmental impact assessments. It is also a partner in the Centre for African Conservation Ecology (ACE). Staff and postgraduates participate in resource, transformation and restoration ecological research.

Current research programmes are conducted within the realm of environmental studies and are directed towards a broader understanding of land use/cover change, degradation and implications for climatic change; urban architecture and sustainable development issues. Remote sensing and GIS are commonly used as tools to gain this understanding.

#### **RESEARCH AREAS**

- Structural geology of the Cape Fold Belt in the Eastern Cape
- Sedimentary geology of the Cape Super Group, Karoo Sequence and Uitenhage Group
- ▶ Land degradations, particularly soil erosion
- Urban agriculture
- Environmental management



## The lie of the land

**Prof Vincent Kakembo** leads by example as head of the Department of Geosciences at NMMU.

This former Emerging Researcher of the Year who specialises in soil erosion, hill slope hydrology, Geographic Information System (GIS) and remote sensing in his area of expertise in Applied Geomorphology, is actively involved in fieldwork with his students, particularly in the Eastern Cape.

"Understanding present processes lies in investigating past events," says the man who has published extensively and presented papers nationally and internationally, particularly on the subject of soil erosion and land degradation.

Over the years he has supervised more than 20 postgraduates, including those who are currently conducting research on land use, cover change, landscape dysfunctionality and restoration.

"A desire to gain my rightful place in the research arena is what drives me."

## DID YOU KNOW?

 NMMU has an approved Research Niche Area entitled "Building a biodiversity-based economy in the Eastern Cape".

## Stay connected:

Director: Dr Derek du Preez Tel: 041 504 2721 E-mail: derek.dupreez@nmmu.ac.za

Department of Agriculture and Game Ranch Management Head of Department: Prof Pieter van Niekerk Tel: 041 504 3631 E-mail: pieter.vanniekerk@nmmu.ac.za

Department of Botany Head of Department: Prof Eileen Campbell Tel: 041 504 2329 E-mail: eileen.campbell@nmmu.ac.za

Department of Geosciences Head of Department: Prof Vincent Kakembo Tel: 041 504 4516 / 2325 E-mail: vincent.kakembo@nmmu.ac.za



"Societies conserve nature when they understand it, and can only understand nature by experiencing it firsthand. To help students appreciate something as foreign as the ocean, they have to go to the shore."

 Dr Ronel Nel, 2010 Faculty of Science Emerging Researcher of the Year

## Stay connected:

Department of Zoology Head of Department: Prof Graham Kerley Tel: 041 504 2425 E-mail: graham.kerley@nmmu.ac.za

Integrated Environmental & Coastal Management (IECM) Head of Department: Dr Derek du Preez Tel: 041 504 2721 E-mail: iecm@nmmu.ac.za

## Department of Zoology

The Zoology Department's research activities fall under the inclusive heading of Sustainable Environmental Ecology. It is research focused on ecosystems of the coastal zone and hinterland, the functional processes driving these systems, the structure and function of ecosystems, and their interaction within the coastal area.

#### **RESEARCH AREAS**

- Coastal zone resource management
- Water quality assessment and shallow water chemistry
- Ecosystem modelling and analysis
- Terrestrial ecology

## Integrated Environmental & Coastal Management (IECM)

The IECM is dedicated to researching all aspects of the coastal zone environment. Using the knowledge and expertise it derives, the unit provides an environmental service for the benefit of all people living in the coastal zone of Africa and places special emphasis on long-term sustainability of the natural environment.

Postgraduates can work within a wide range of research areas and with permits in various adjacent environments like the Swartkops River Estuary, the Coega deepwater harbour development, the coastline and Greater Addo Elephant National Park.

IECM also has access to well-equipped laboratories where postgraduates can examine their findings.

#### **IECM EXPERTISE**

- Coastal zone management and planning
- > Environmental Impact Assessments and independent reviews
- > Development of environmental management programmes and rehabilitation plans
- > Aquatic and terrestrial conservation planning and natural resource management
- Aquatic and terrestrial biomonitoring
- Water quality and aquatic pollution assessment
- Environmental education and training
- > Applied environmental research
- ► Geographical Information Systems (GIS)
- ▶ Research diving unit

# Polish study awards for leading conservationist and student

Prof Graham Kerley, director of the Centre for African Conservation Ecology (ACE) and head of zoology, along with zoology PhD student Marietjie Landman, were respectively awarded a sabbatical opportunity and a summer school bursary to study at the Mammal Research Institute of the Polish Academy of Sciences.

Widely-respected conservationist Kerley, who was awarded a prestigious Marie Curie Fellowship, took the opportunity to focus on the concept of animal refugee species (species being kept in inappropriate habitats), using the European bison as a model, during his six-month sabbatical at the Mammal Research Institute. "I wanted to find out why a large grazer like the bison is being kept in forests (as is the current conservation strategy for this animal). I analysed its evolutionary (breeding) background and ecology, and found that it should be offered opportunities to move into open habitat ... Managing this species in a forest habitat is not the most effective approach to increasing bison numbers."

Prof Kerley, who in 2009 was appointed to the board of the South African National Parks, said the fundamental concept of a species being kept in an inappropriate habitat had relevance for South Africa. "One just has to look at the forest-dwelling Knysna elephant. It is exactly comparable. I have a PhD student working on research in this area at the moment."

Based on the quality of her extensive post-graduate research, Ms Landman was one of a handful of students, selected worldwide, to receive a full bursary to attend the BIOSEB (CHECK) Summer School in Ecology and Biodiversity at the Mammal Research Institute.

While at the summer school, Ms Landman, who is studying mega-herbivore (elephant and rhino) foraging and its impact over the last 30 years in the Addo Elephant National Park, was awarded the prize for the best student poster presentation.



## Centre for African Conservation Ecology (ACE)

The Centre for African Conservation Ecology (ACE) comprises of staff and postgraduate students of Zoology, Botany and Geography departments, with an advisory board comprising representatives of the state, NGO and private conservation and environmental management interests. ACS's vision is to build its national and international recognition as a centre of excellence in the fields of ecological and conservation research, as well as postgraduate training, and to expand this role in Africa.

ACE's 2009 outputs included 23 refereed scientific publications, six technical reports and 12 conference proceedings. One PhD and nine MSc students graduated, while 11 PhD students and six MSc students were busy with their degrees. A number of students received top awards, in recognition of their research.

In 2009, ACE's research activities were grouped under the following themes:

- ▶ conservation neology ▶ animal-plant interactions ▶ resource ecology
- predator-prey interactions > transformation and restoration ecology
- biodiversity and fundamental research (research on any intellectually interesting ecological or evolutionary question).

A unifying feature, cutting across all themes, was the issue of global change.

#### **RESEARCH AREAS**

- Conservation biology
- Animal-plant interactions
- Resource ecology
- Predator prey interactions
- Transformation and restoration ecology
- Biodiversity
- Fundamental research

#### PROGRAMMES

Qualification	Programme structure		Study option	
Qualification	Research	Coursework	Full-time	Part-time
BScHon (Botany)		•	٠	•
BScHons (Geography)		•	٠	•
BScHons (Geographical Information Systems)		•	•	•
BScHons (Geology)		•	•	•
BScHons (Zoology)		•	•	•
MSc (Botany)	•		٠	•
MSc (Geography)	•		٠	•
MSc (Geology)	•		٠	•
MSc (Zoology)	•		٠	•
MTech (Agriculture)	•		٠	•
MTech (Game Ranch Management)	•		٠	•
PhD (Botany)	•		٠	•
PhD (Geography)	•		•	•
PhD (Geology)	•		٠	•
PhD (Zoology)	•		٠	•
DTech (Agriculture)	•		•	•

#### Program

ADMISSION

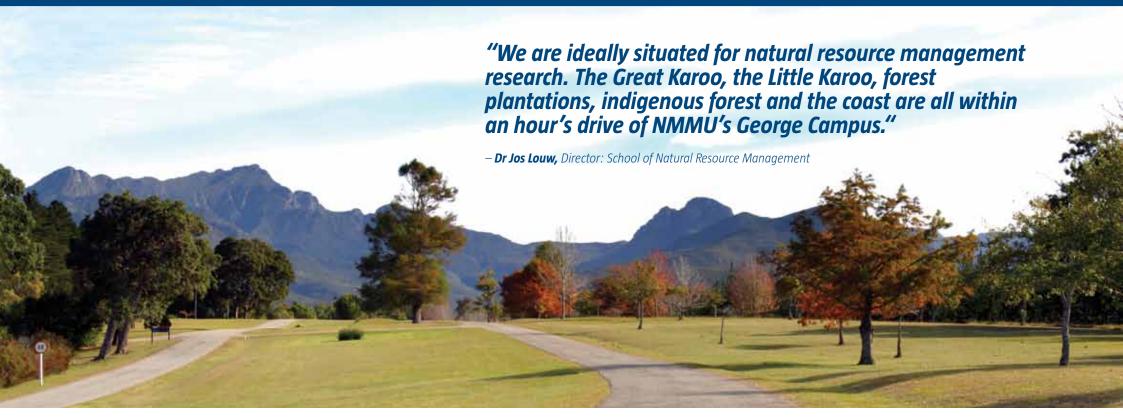
Programme type	Requirements
Honours degrees	A relevant bachelor's degree with an acceptable level of competence attained or equivalent approved by Senate Candidates should have passed a subject at third-year level before proceeding with the honour degree programme in that subject
Master's degrees	A relevant bachelor's honours degree or equivalent approved by Senate
Doctoral degrees	A relevant master's degree or equivalent approved by Senate
	culty officer or visit www.nmmu.ac.za/science for additional ulated by the department

#### DID YOU KNOW?

- The Centre for African Conservation Ecology (ACE) successfully organised the prestigious international Society for Conservation Biology's Annual Meeting in 2007 – a first for Africa - attended by more than 1650 delegates from 88 countries.
- NMMU and the Mantis Collection hospitality group have a mutually beneficial agreement in the areas of renewable energy, intensive training courses and short management courses.
- The Greater Addo National Park and the Baviaanskloof Mega-Reserve were the initiatives of the Centre for African Conservation Ecology.

### Stay connected:

Centre for African Conservation Ecology (ACE) Director: Prof Graham Kerley Tel: 041 504 2308 E-mail: graham.kerley@nmmu.ac.za



## NMMU's green campus

It's green for go at George where the ever-growing importance of our ecological footprint meets business acumen under the focus of sustainable resource management. The beautiful George Campus is at the heart of the Garden Route, a tourism magnet, and home to several major South African industries like forestry, agriculture and game ranching, to provide scholars with an ideal natural laboratory for applied research at the interface of economics and the environment.

"Sustainable resource management is a niche research area for us. This broad focus area is so critical for our world today," says campus principal Prof Christo Fabricius. It's a research area that provides postgraduates with backdrops as diverse as the semidesert terrain of ostriches to the watery climes of the adjacent coastline and local economic developments, all within an hour's drive of the campus. This outdoor laboratory also takes in a coastline that is rapidly being developed. The latter poses new challenges in terms of sustainable development, particularly in relation to ecosystem services like water, natural tourism assets, biodiversity and coastal and marine resources.

At this green campus with its passion for growing a sustainable planet, postgraduates have wide-ranging, on-tap opportunities to make a difference in seeking, hands-on solutions. Strong mutually-beneficial links with industry have already been established, along with the formation of pro-active partnerships with civic society and government departments, giving postgraduate students easier access to their chosen fields of research. Without doubt, the George Campus is one of the most scenic and stimulating learning environments for postgraduates who can "live and learn" their research.

## **George Campus**

Growing tomorrow

#### t the heart of the Garden Route, just four hours' drive from Nelson Mandela Bay, is NMMU's George Campus with its School of Natural Resource Management in idyllic surrounds at the foot of the Outeniqua Mountains.

This school has unique natural renewable resource management expertise and various postgraduate study opportunities in agriculture, game ranch management, nature conservation, forestry and wood technology. The campus itself is surrounded by commercial and indigenous forests, protected areas, tourism destinations and farmland, making it an ideal setting for integrating academic training and practical experience.

Supporting the school that has produced so many achievers in the natural environment is the School of Business & Social Sciences with its sought-after business and managerial know-how. This business acumen has been channelled to serve our "green" campus with resource management research that ensures both sustainability and economic viability.

NMMU's George Campus knows that producing competent future employees is no longer good enough. Today it is "growing" employers - postgraduates who can use their combined natural resource knowledge and business acumen anywhere in the world in order to give others work.

## Forestry

Forestry is a dynamic industry that forms the backbone of the country's pulp and paper, sawmilling and furniture manufacturing industries. It is one of the largest and fastest growing sectors of the South African economy, and contributes 9% to the Gross Domestic Product of the manufacturing industry. In short, it's recognised as the world-class standard.

The South African forest industry relies upon the intensive management of exotic monocultures.

The forest industry provides career opportunities for plantation managers, forest engineers, nursery specialists, soil scientists, ecologists, human resource managers and many others. The dynamic forestry market also creates an economic climate for entrepreneurs. The trained wood technologist can practice this occupation in various fields, including timber processing and treating, plywood manufacture, fibre and particle board manufacture, sawmilling, furniture and joinery manufacture, as well as building and timber construction.

NMMU provides forestry training that promotes the goals and philosophies of the South African forest industry. The career-focused programmes in forestry and wood technology are driven by industry's needs and standards. With a strong focus on practical application and skills training, these graduates are sought-after locally and internationally.

Connect to: Dr Jos Louw Tel: 044 801 5019 • E-mail: josua.louw@nmmu.ac.za



"Our sustainable green campus provides a unique living and learning environment for discerning postgraduate students who care about the Earth and its management."

- Prof Christo Fabricius, Campus principal

## Stay connected:

General Information Tel: 041 504 2162 E-mail: postgrad@nmmu.ac.za

Admissions office Tel: 044 801 5008 / 5509 / 5566

Faculty website www.nmmu.ac.za/georgecampus

"George is one of the fastest growing cities in South Africa. The surrounding Garden Route is also growing at an unprecedented rate, posing new challenges in terms of the sustainability of development."



"I am fascinated by the economic sciences involved in natural resource management. I enjoy comparing current costs and benefits with future costs and benefits."

> Dr Jaap Steenkamp, 2010 Emerging Faculty Researcher of the Year, George Campus.

## Stay connected:

School of Natural Resource Management Director: Dr Josua Louw Tel: 044 801 5019 E-mail: josua.louw@nmmu.ac.za

## Agricultural Management

Agriculture is no longer merely a traditional farming operation. Economic and environmental pressures have forged a highly-competitive global agricultural industry encompassing food and fibre production, processing, packaging, distribution and exports, all driven by market and consumer forces. To meet the challenges of the agricultural industry today, managers need a combination of sound technical, business and entrepreneurial skills to create prosperity but ensure long-term sustainability. The Agricultural Management programme provides opportunities for development of entrepreneurship in both primary and secondary agricultural systems and the selfempowerment of rural communities through its scholarship, research and community engagement.

Connect to: Ms Maryna Lehmann-Maritz

Tel: 044 801 5055 • E-mail: maryna.lehmann-maritz@nmmu.ac.za

### Game ranch management

NMMU has a long history in quality natural resource management education and is a firm favourite of students who study forestry, nature conservation and agriculture. Game ranch management is an exciting new addition and complements the integrated management of our natural resources.

Game ranch management is the wise management and utilisation of renewable wildlife resources to ensure a sustainable game and ecotourism industry. There is an increasing awareness of South Africa as a major international wildlife destination catering for all tastes, from game viewing to bagging the Big 5. This has stimulated a growing interest in game ranching as a viable farming venture and career. The aim of the Nature Conservation Department, in conjunction with the Agriculture Department, is to be a leader in wildlife management education and technology, providing internationally-recognised students for the industry.

#### Connect to: Mike Cameron Tel: 044 801 5018 • E-mail: mike.cameron@nmmu.ac.za

"South Africa is blessed with very high levels of cultural and biological diversity. This serves as motivation for me to mentor our students to address complex problems regarding natural resource management."

 Dr Josua Louw who supervises MTech students in forest land classification and evaluation, soil science and ecological mapping

## Nature conservation

NMMU's George Campus provides the ideal study environment for Nature Conservation because of its beautiful setting and natural surroundings - from the warm Indian Ocean through the evergreen indigenous forests to the fynbos-clad mountains and Karoo hinterland.

Nature Conservation is the wise management and utilisation of natural renewable resources in a sustainable manner to ensure the maintenance of biodiversity. There is an increasing awareness that the conservation of the world's natural resources is vital for human survival, thus the growing interest in conservation as a career. The aim of this department is to be a leader in conservation education and technology.

Connect to: Mike Cameron Tel: 044 801 5018 • E-mail: mike.cameron@nmmu.ac.za

#### PROGRAMMES

Qualification	Programme structure		Study option	
Quaincation	Research	Coursework	Full-time	Part-time
MTech (Agriculture)	•		•	•
MTech (Forestry)	•		•	•
MTech (Nature Conservation)	•		•	•
MBA (Business Management) with certain modules via video link from Port Elizabeth				Block release
DTech (Agriculture)	•		•	•
DTech (Nature Conservation)	•		•	•

## Wood technology

The Southern Cape is seen as the historical and traditional timber centre of South Africa. This campus provides students with study opportunities to qualify for a rewarding career in the field. Records show a 100% employment rate of graduates over the past 15 years with NMMU alumni filling prominent positions in production, management, training, marketing and research at timber preservation plants, mining timber mills, sawmill companies, roof-truss manufacturers, the furniture manufacturing industry, the South African Bureau of Standards and at the CSIR.

Connect to: Dr Josua Louw Tel: 044 801 5019 • E-mail: josua.louw@nmmu.ac.za



"This is a great privilege and opportunity which I am grasping with both hands. I look forward to applying the knowledge gained to the advantage of NMMU, its students and the greater community."

 Bianca Currie, awarded a SANPAD (South Africa-Netherlands Research Programme on Alternatives in Development) capacity development grant, funded by the Netherlands Ministry of Foreign Affairs.

#### ADMISSION

Programme type	Requirements
MTech degrees	A relevant Bachelor of Technology (BTech) degree or equivalent approved by Senate A detailed CV must accompany the application in the case of equivalent qualifications
MBA (certain modules via video link from Port Elizabeth)	A three-year national diploma, bachelor's degree or an equivalent NQF 6 level qualification A minimum of three years' managerial business experience or five years' general working experience in a business-related environment A pass mark in Accounting at tertiary level and computer literacy are recommended
DTech degrees	A relevant Master of Technology (MTech) degree or equivalent approved by Senate A detailed CV must accompany the application in the case of equivalent qualifications

## **Business studies**

Prospective postgraduate students are able to acquire master's level qualifications through NMMU's Faculty of Business and Economic Sciences while being based in George. Certain modules of the MBA degree are offered via video link from Port Elizabeth, and master's theses with a resource economics focus can be co-supervised by academics in George and in Port Elizabeth.

NMMU offers professional development opportunities in the form of management programmes in the fields of business management, leadership, and management development.

For MBA enquiries connect to: Marianne Doubell Tel: 044 801 5561/5010 • E-mail: marianne.doubell@nmmu.ac.za

The management programmes are tailor-made for persons who wish to embark on a management career in order to effectively implement best practice and strategy at a middle management level within the organisation.

For management programme enquiries connect to: Martie Meintjes Tel: 044 801 5570 • E-mail: martie.meintjes@nmmu.ac.za

#### **CAREER-ADVANCEMENT PROGRAMMES**

Qualification	Programm	me structure Study opti		option
Qualification	Research	Coursework	Full-time	Part-time
Management Development Programme (MDP)		•		• Evening classes
Advanced Leadership Certificate (ALP)		•		• Evening classes
Business Management Programme (BMP)		•		•

#### ADMISSION

Programme type	Requirements
MDP	An NQF level 4 qualification and at least three years' management experience
ALP	An NQF level 4 qualification and at least three years' management experience
BMP	An NQF level 4 qualification or equivalent plus two years' working experience
Please consult the f	aculty officer or visit www.nmmu.ac.za/george for additional

requirements as stipulated by the department

Note: On successful completion of the BMP or ALP, credits are awarded onto the MDP On successful completion of the MDP, credits are awarded onto the following undergraduate qualifications: BCom (Business Studies) and National Diploma (Management)



"My research focus is on the frontier between commercial agriculture and environmental regulations. If we cannot get the relationship right, we can forget about a sustainable future."

- **Dr Beatrice Conradie**, 2010 Researcher of the Year – George Campus.

#### DID YOU KNOW?

• Postgraduates can specialise in their chosen natural field, be it sustainable land use, conservation, aquaculture or ostriches, because of the amazing study sites that are easily accessible within the immediate vicinity of George Campus.

## Stay connected:

School of Business & Social Sciences Director: Marianne Doubell Tel 044 801 5561/5010 E-mail: marianne.doubell@nmmu.ac.za

## **Fields of Study**

Fields

**Note:** The fields indicated only reflect the major focus areas for postgraduate study and research. Master's and doctoral research topics are not restricted to the list and may include other focus areas as approved by Senate.

#### Α

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Advanced Manufacturing
Advanced Medical &
Advanced Midwifery and
Neonatal Nursing Science
Advanced Nursing Education
Advanced Primary Health Care
Advanced Psychiatric Nursing Science
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African Conservation Ecology 73,81
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Afrikaans26-27
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Architectural Conservation22-23
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Computer Science & Information Systems76-78
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Conservation Ecology 72,80-83
Conservation Studies 72,80-83
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Construction Management52-53
Conflict Transformation & Management
Cost and Management Accounting
Counselling Psychology
Counter-trade and industrial development
Criminal Justice

#### 

#### D

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Development Studies	35
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Environmental Health	59
Environmental Management	80-81
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isiXhosa		Musicology		Psycho biographical research		Studio Arts	
		Music Technology		Public Administration & Management		Statistics	
J				Public Relations Management		Structural Geology	
Journalism (Media Studies)		N		·		Supply Chain Management	
		Nanophotonics	76-78	Q		Surface Protection Technologies	
L		Natural Resource Management		Quality Management	50-51	Sustainable Government & Developmer	
Labour Law	69-71	Nature Conservation		Quantum Mechanics (Physics)		Systems research (Psychology)	
Labour Relations & Human Resources		Nephrology Nursing Science		Quantity Surveying		, , , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Laser materials processing		Neuro-psychology				Т	
Law (Faculty)		Nursing Administration		R		Taxation	
Logistics		Nursing Education		Radiography		Terrestrial ecosystems and rehabilitatior	
Language & Literature Studies		Nursing Science		Renewable energy		Text Linguistics	
Language Teaching				Restoration Ecology		Textile Design & Technology	
Lexicography		0		Robotics		Textile Science	
Lifespan Career Development (Psycholog		Operating Theatre Nursing Science	62-63	Rubber Technology	6,74-75	Therapeutic Psychology	
Low cost housing	•	Operations Management		57		Tourism	
5	,	Optical fibre research		S		Tourism heritage studies	
M		Oral tradition		Safety, Health & Environment Studies	52-53	Tourism positioning and relationship mark	
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Management Accounting		5		Sculpture (Fine Arts)		Translation	
Management Sciences		Р		Sedimentary Geology			
Marine Biology (Botany)		Painting (Fine Arts)	24	Semantics	26-27	U	
Maritime Development		Peace and Development Studies	35	Semiconductor materials and nanostructur	res 77-78	Urban Agriculture	
Marine (including estuarine) ecosystems	79,80	Performing Arts (Music)	25-26	Sociology	29-31	Urban Development	22-23
Marketing Management		Pharmacy	64-65	Science & Mathematics Education	43-47	Usability Studies	
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## **Contact details**

		George Campus					
	South Campus, Summerstrand	North Campus, Summerstrand	Second Avenue Campus	Missionvale Campus	George Campus		
Contact Centre	041 504 1111				044 801 5111		
Postgraduate / Mature Student Enquiry	041 504 2162				044 801 5008		
Admission Enquiries	041 504 3619				044 801 5566		
Student finance	Funding for honours studies: 041     Funding for master's and doctoral states				044 801 5098		
Student housing	Sanlam Student Village (located be	stgraduate Student Village (Summerstrand South Campus) for master's and doctoral students: 041 504 3941 nlam Student Village (located between Summerstrand South and North Campuses) for honours and senior ndergraduate students: 041 504 4506					
Sport Bureau	041 504 2165	041 504 3468	041 504 3852	041 504 1244	044 801 5037		
Career Counselling	041 504 2511	041 504 3306 / 3222	041 504 3854	041 504 1106	044 801 5051		
Recognition of Prior Learning	041 504 2932						
Office for International Education	+27 (0)41 504 2161				+27 (0)44 801 5008		
Disabilities services	041 504 2511	041 504 3306 / 3222	041 504 3854	041 504 1106	044 801 5051		
Faculties:							
Faculty of Arts	Arts Honours, master's and doctoral programmes: 041 504 4266 / 2855 / 2802 MTech and DTech programmes: 041 504 3153 / 3478						
Faculty of Business & Economic Sciences	044 801 5561 School of Natural Resource						
Faculty of Education	041 504 2125						
Faculty of Engineering, the Built Environment and Information Technology	at and Engineering: 041 504 3447 Built Environment: 041 504 3480 Information and Communication Technology: 041 504 3660						
Faculty of Health Sciences	041 504 2121 / 2956 / 2957						
Faculty of Law	041 504 2309 / 2588	041 504 2309 / 2588					
Faculty of Science	041 504 2268 / 9922						

## University address

The Registrar PO Box 77000 Nelson Mandela Metropolitan University Port Elizabeth 6031

E-mail: postgrad@nmmu.ac.za Website: www.nmmu.ac.za/postgrad





www.facebook.com/NMMU4U



## George Campus address

Nelson Mandela Metropolitan University George Campus Private Bag X 6531 George 6530 E-mail: george-info@nmmu.ac.za

Website: www.nmmu.ac.za/georgecampus

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All reasonable steps have been taken to ensure that the information contained in this guide is accurate at the date of publication. NMMU reserves the right to make changes to the programme details (eg rules, admission requirements, programme offerings) as published in this guide. Prospective students are advised to consult the admissions office prior to applying.



South Campus, Summerstrand

Bird Street Campus, Central: NMMU Business School

Second Avenue Campus, Summerstrand



- Marketing and Corporate Relations
  PO Box 77000
  Nelson Mandela Metropolitan University
- Port Elizabeth 6031 South Africa
- Port Elizabeth Campuses Tel: 041 504 1111
- George Campus Tel: 044 801 5111 Email: postgrad@nmmu.ac.za





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