

Ceremony 10

**Faculty of Engineering, the Built Environment and
Information Technology**

- **School of Information and Communication Technology**

Saturday, 8 April 2017, 09:30

Vodacom NMMU Indoor Sports Centre, South Campus, Summerstrand

CONGRATULATORY MESSAGE

Graduation is a momentous occasion, representing the crowning moment of all your hard work and the many sacrifices that you and your loved ones have made to reach this milestone.

For us, graduation is the highlight of the university calendar as we witness successful students cross the stage to be capped and enter a new chapter in their lives. Each of you has a unique story to tell.

We salute and applaud your achievement and wish you all the best in your future endeavours. Your time here at the Nelson Mandela Metropolitan University (NMMU) was but a stepping stone towards your future.

We trust that NMMU has equipped you not only with an excellent academic qualification for the many challenges of life and work, but also with life-changing experiences to shape your future.

It is our wish that you will leave here today as proud NMMU graduates who will continue to champion social justice and equality, and be change agents in building a better society and a better world.

Thank you for offering us the privilege of making NMMU a part of your life. Your success is our success, and as NMMU alumni, we look forward to watching your story unfold.

Congratulations!

**Ms Santie Botha
Chancellor**



**Prof Derrick Swartz
Vice-Chancellor**



ABOUT NMMU

Nelson Mandela Metropolitan University (NMMU) is a new generation university, distinguished by a wide range of study options and access routes open to students. With 450 programmes from certificate through to doctoral level across 130 different career fields, NMMU truly is a comprehensive university.

Founded on more than a century of quality higher education, NMMU nurtures innovation, fosters creativity, embraces technology and develops people to meet the challenges of tomorrow. NMMU is a product of a merger of the University of Port Elizabeth and the PE Technikon in 2005. Prior to such a merger, the Vista University campus of Port Elizabeth was incorporated into the former University of Port Elizabeth.

The university has a strong track record of research, working extensively in partnership with business and industry, making NMMU a valued contributor to the socioeconomic development of the region and beyond.

This year (2017), the university has 24530 students and close to 4100 permanent and contract staff, based on seven campuses in Nelson Mandela Bay and George.

Leaders

NMMU's Vice-Chancellor is Professor Derrick Swartz, the Chancellor is Ms Santie Botha and the Chair of Council is Judge Ronnie Pillay.

Location

Six of NMMU's campuses are in Nelson Mandela Bay and one is in George on the Garden Route. The seven campuses are:

- South Campus in Summerstrand (within a 720-hectare private nature reserve)
- North Campus in Summerstrand
- Second Avenue Campus, home to the new "green" Business School, in Summerstrand
- Bird Street Campus which will be a new postgraduate arts hub in Central
- Missionvale Campus in Missionvale
- George Campus in George
- The Ocean Sciences Campus (recently purchased from CSIR)

Facilities and supportive teaching and learning environment

NMMU is privileged to have outstanding facilities. All students have access to well-equipped laboratories, some of which are open 24/7, and free Wi-Fi throughout all its campuses. All the lecture halls are equipped with the latest technology and students have the opportunity of using additional e-learning tools online. The campus libraries and information services network offers a state-of-the-art integrated online system. There are cafeterias, food courts and coffee shops.

A range of opportunities are provided to enhance the academic success of students. These include a first-year orientation programme, peer-facilitated learning opportunities (eg, Supplemental Instruction, e-PAL, tutorials, practicals, mentor programmes, 'Keys to Success' workshops and online resources). NMMU also promotes both in and outside of the class learning to enhance holistic student development. To recognise the learning that takes place outside of the class, NMMU has developed an innovative, electronic co-curricular record system.

The University also offers the finest sporting facilities in the Eastern Cape and numerous venues for conferences, meetings and other special events.

Faculties

NMMU has seven faculties. They are:

- Arts
- Business and Economic Sciences
- Education
- Engineering, the Built Environment and Information Technology
- Health Sciences
- Law
- Science

Academic focus areas

Though NMMU prides itself on its vast range of programme offerings, it has a number of strategic areas in terms of its core business of teaching and learning, research and engagement. They are:

- Health and wellness
- Economic and business development with a focus on job creation and entrepreneurship
- Materials and process development for industry and manufacturing
- Emerging information and communications technology for development
- Environmental and natural resource management
- Culture, communication and language
- Leadership, governance, democracy and justice
- Educational development in support of excellence in teaching, learning and curriculum
- Infrastructure and human settlement development

Strategic research areas

- Biodiversity conservation and restoration
- Coastal marine and shallow water ecosystems
- Cyber citizenship
- Democratisation, conflict and poverty
- Earth Stewardship Science
- Health and wellbeing
- Humanising pedagogies
- Manufacturing technology and engineering
- Nanoscale characterisation and development of strategic materials
- Science, Mathematics and Technology Education for Society
- Strategic energy technologies
- Sustainable human settlement development and management
- Sustainable local economic development

Research and Engagement entities

NMMU has 31 focused faculty based and 7 institution-wide entities (institutes, centres and units) that exist over and above the formal academic structures that are aimed at promoting engagement, research, technology transfer and innovation. They include the likes of InnoVenton; NMMU's Institute for Chemical Technology and Downstream Chemicals; eNtsha, an institute that focuses on seeking solutions through engineering; Earth Stewardship Science Research Institute (ESSRI); and Institute for Coastal and Marine Research. Many are award-winning entities.

'Green' endeavours

In line with its value of respect for the natural environment, NMMU is involved in a large number of "green" initiatives that will not only reduce its own carbon footprint but is also assisting others in seeking renewable energy resource solutions. The university's new Business School, for example, was the first in the country to be awarded four-star "green" accreditation for a public and education building by the Green Building Council of South Africa in 2013. The "green" agenda is supported by the Centre for Renewable Energy, which is recognised as a research leader in the field.

International links

Just over 8% of NMMU's student body comes from 64 different countries outside of South Africa. The Office for International Education fosters relationships and manages inter-institutional linkages to enrich both NMMU staff and students. These partnerships also foster our growing research. NMMU regularly sends students for study abroad opportunities.

Reasons to be proud:

- NMMU's diversity and multiculturalism. Our African students alone come from 34 countries on the continent.
- The High Resolution Transmission Electron Microscopy (HRTEM) Centre, which opened in 2011, is the only place in Africa where scientists can view atoms in line with NMMU's growing prominence for nanoscience.
- More than 40% of NMMU academic staff have doctoral degrees when compared to the national average of 33%.
- New infrastructure like the iconic Engineering block on North Campus and the new Human Movement Science Building complete with a 100m research sprint track on South Campus.
- NMMU has excellent links with industry and business, particularly within the pharmacy, tourism and automotive industries.
- NMMU's ongoing education partnership with Fifa, as one of only two presenters in Africa of an international sports management programme through the Centre International d'Etude du Sport (CIES).
- The success of being the first student racing team from Africa to successfully compete in the Formula Student event in Germany. NMMU students designed and built a racing car to exacting specifications.
- The university was selected in 2012 to facilitate the country's first electric e-mobility programme and technical centre, called the uYilo e-mobility programme.
- NMMU has extensive expertise within the field of friction processing which has resulted in numerous national awards for the patented technology, WeldCore®. This technology has also aligned the strategic partnership between NMMU and Eskom.
- NMMU's accounting and pharmacy students who continue to produce top results in their national external examinations.
- NMMU's international award-winning choir which continues to perform around the globe to wide acclaim.

ACADEMIC DRESS

Special academic attire was designed for office bearers at Nelson Mandela Metropolitan University to be worn at prestigious academic events like graduation.

Each outfit – from that of the Chancellor and Vice-Chancellor to those of the Executive Deans – has been especially selected to signify a particular office, in keeping with attire worn by academics at leading universities throughout the world.

The gowns, caps and hoods of NMMU graduates were similarly inspired and are explained in detail below.

Academic dress for graduates at NMMU is as follows:

Doctoral degrees

Gown: Cardinal red polyester cashmere gown with long pointed sleeves pleated up with blue cord and button and lined with blue satin with 125mm facings and a blue collar.

Hood: Full shape hood in cardinal red polyester cashmere lined with faculty colour satin and edged around the cowl with 75mm faculty colour ribbon with 15mm blue ribbon overlaid central. 50mm wide straight neckband in cardinal red polyester cashmere, 25mm faculty colour ribbon in centre of neckband with 15mm blue ribbon overlaid central to faculty ribbon.

Cap: Round doctor's bonnet in black velvet with faculty colour cord and tassel.

Master's degrees

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail is used.

Hood: Full shape blue hood lined faculty colour satin and edged around the outside of the cowl with 75mm faculty colour with ribbon. 50mm straight neckband in blue with 25mm faculty colour ribbon centred.

Cap: Black mortarboard with blue tassel.

Postgraduate diplomas

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

Hood: Blue simple shape hood lined silver grey satin. Straight neckband with 15mm faculty ribbon on top edge of neckband and around cowl. 15mm silver grey ribbon on bottom edge of neckband and around cowl spaced 20mm away from the faculty colour.

Cap: Black mortarboard with blue tassel.

Bachelor honours degrees

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

Hood: Blue simple shape hood lined silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside. 15mm silver grey ribbon runs along the outer edge of the cowl, overlaid on faculty ribbon and on top edge of neckband.

Cap: Black mortarboard with blue tassel.

Four-year bachelor's degrees (including Bachelor of Technology degrees)

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

Hood: Blue simple shape hood lined silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside. Silver grey cord runs along the outer edge of the cowl, overlaid on faculty ribbon and on top edge of neckband.

Cap: Black mortarboard with blue tassel.

Three-year bachelor's degrees

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

Hood: Blue simple shape hood lined with silver grey satin with 50mm wide straight neckband in faculty colour. Cowl edged 75mm faculty colour ribbon on the outside.

Cap: Black mortarboard with blue tassel.

Advanced diploma

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

Hood: Blue simple shape hood lined with silver grey satin with 50mm wide straight neckband. 15mm faculty colour ribbon on top and bottom of neckband around cowl.

Cap: Black mortarboard with blue tassel.

Diploma

Gown: Black gown, long pointed sleeves pleated up with blue twisted double cord and button. Similar cord detail.

Hood: Blue simple shape hood with 50mm wide straight neckband. 25mm faculty colour ribbon on centre of neckband.

Cap: Black mortarboard with blue tassel.

Faculty colours

Arts:	Yellow
Business & Economic Sciences:	Plum
Health Sciences:	Apple green
Law:	Grey blue
Education:	Orange
Science:	Dark green
Engineering, the Built Environment and Information Technology:	Light blue
Business School	Black and magenta

Messrs T. Birch & Co (Pty) Ltd and its subsidiary, Croft Magill & Watson (Pty) Ltd, have been appointed as official robemaker to the University and as contracted suppliers of choice to students for graduation academic attire.

The Image Factor has been appointed as the official photographer of the University.

2017 AUTUMN GRADUATION CEREMONIES APRIL 2017

Friday, 31 March 2017		
Ceremony 1	09:30	George Campus All Programmes
Tuesday, 4 April 2017		
Ceremony 2	09:30	Faculty of Arts (School of Architecture; School of Music, Art & Design and School of Language, Media & Culture)
Ceremony 3	14:30	Faculty of Education
Wednesday, 5 April 2017		
Ceremony 4	09:30	Faculty of Business and Economic Sciences (School of Management Sciences - excluding Undergraduate Diploma qualifications)
Ceremony 5	14:30	Faculty of Arts (School of Governmental & Social Sciences)
Thursday, 6 April 2017		
Ceremony 6	09:30	Faculty of Business and Economic Sciences (School of Economics, Development & Tourism)
Ceremony 7	14:30	Faculty of Business and Economic Sciences (School of Industrial Psychology & Human Resources, Graduate School and others)
Friday, 7 April 2017		
Ceremony 8	09:30	Faculty of Engineering, the Built Environment and Information Technology (School of the Built Environment)
Ceremony 9	14:30	Faculty of Engineering, the Built Environment and Information Technology (School of Engineering)
Saturday, 8 April 2017		
Ceremony 10	09:30	Faculty of Engineering, the Built Environment and Information Technology (School of Information & Communication Technology)
Ceremony 11	14:30	Faculty of Science (School of Computing Sciences, Mathematics, Physics & Statistics and School of Biomolecular & Chemical Sciences)
Monday, 10 April 2017		
Ceremony 12	09:30	Faculty of Science (School of Environmental Sciences)
Ceremony 13	14:30	Faculty of Law Faculty of Business and Economic Sciences (School of Accounting, Postgraduate qualifications including Bachelor of Technology degrees)
Tuesday, 11 April 2017		
Ceremony 14	09:30	Faculty of Health Sciences (School of Clinical Care Sciences and School of Medicinal Sciences)
Ceremony 15	14:30	Faculty of Health Sciences (School of Behavioural Sciences and School of Lifestyle Sciences)
Wednesday, 12 April 2017		
Ceremony 16	09:30	Faculty of Business and Economic Sciences (School of Accounting – Undergraduate qualifications)
Ceremony 17	14:30	Faculty of Business and Economic Sciences (School of Management Sciences – Undergraduate Diploma qualifications)

OFFICE-BEARERS OF THE UNIVERSITY

CHANCELLOR

MS S BOTHA: BEcon, BEconHons(US)

CHAIRPERSON OF COUNCIL

JUSTICE R PILLAY: BA, LLB(UDW)

VICE-CHANCELLOR

PROF DI SWARTZ: BA(UWC), MA, DPhil, Doctor in Human Rights Law (hc)(Essex University, UK)

DEPUTY VICE-CHANCELLOR: INSTITUTIONAL SUPPORT

DR SW MUTHWA: BA(SW)(Fort Hare), BA(SW)Hons(Wits), MSc, PhD(London University, UK)

DEPUTY VICE-CHANCELLOR: RESEARCH AND ENGAGEMENT

PROF AWR LEITCH: BSc, BScHons, MSc, PhD(UPE)

DEPUTY VICE-CHANCELLOR: TEACHING AND LEARNING

PROF DM ZINN: BA, BAHons, HDE(UCT), MEd, DEd(Harvard University, USA)

EXECUTIVE DIRECTOR: FINANCE

MR MR MONAGHAN: BCom(UPE), BComHons(UNISA), Professional Accountant(SA)

EXECUTIVE DIRECTOR: HUMAN RESOURCES

MS VN BAM: BSocSc(UCT), PGDip(UFH), MBL(UNISA)

REGISTRAR

DR F GOOLAM: BSc, HDE, BEd, MEd(UDW), PhD(UP)

PRESIDENT OF ALUMNI ASSOCIATION

DR R JONAS: BA(UWC), HDE, BAHons(Unisa), MA(UPE), PhD(NMMU)

EXECUTIVE DEANS OF FACULTIES:

ARTS

PROF MJR BOSWELL: BSocSc, BSocScHons, MSocSc(UCT), PhD(Vrije Universiteit, Netherlands)

BUSINESS AND ECONOMIC SCIENCES

DR I LAGARDIEN: PGDip, MSc(London School of Economics), PhD(University of Wales)

EDUCATION

DR SF MOENG: BA, HDE, BEdHons(UPE), MSc(St Cloud State University, USA), DEd(NMMU)

ENGINEERING, THE BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

DR OSW FRANKS: BSc MechEng, MInd Admin(UCT), Hons (B&A)(US), PhD (Engineering Science)(USF - USA), Pr Eng

HEALTH SCIENCES

PROF L PEPETA: MBChB (Unitra), FCPAED(SA), DCH(SA), MMed (Wits)

LAW

PROF A GOVINDJEE: BA, LLB(RU), LLM(UPE), LLD(NMMU)

SCIENCE

PROF A MURONGA: BSc, UED(UNIVEN), BScHons, MSc(UCT), PhD (University of Minnesota, USA)

DEAN OF TEACHING AND LEARNING

PROF CD FOXCROFT: BA, BAHons, MA, DPhil(UPE)

DEAN OF STUDENTS

MR LP JACK: NDip(PMA)(EC Technikon), BTech(PM)(PET), BAPhil(US), MCom(UKZN)

ORDER OF PROCEEDINGS

ENTRANCE OF ACADEMIC PROCESSION

(The congregation is requested to rise while the academic procession enters the hall)

MOMENT OF SILENCE

Director: Marketing and Corporate Relations
(The congregation is requested to remain standing)

CONSTITUTION OF CONGREGATION AND WELCOME

Vice-Chancellor
(The congregation is requested to be seated)

AWARDING OF QUALIFICATIONS

Vice-Chancellor

DISSOLUTION OF CONGREGATION

Vice-Chancellor

NATIONAL ANTHEM

(The congregation is requested to stand for the singing of the National Anthem)

DEPARTURE OF ACADEMIC PROCESSION

(The congregation is requested to remain standing until the academic procession has left the hall)

INFORMATION TO MEMBERS OF THE CONGREGATION

Members of the congregation are requested:

- *To rise and remain standing while the academic procession enters and leaves the hall.*
- *Not to leave the hall before the end of the ceremony.*
- *To switch off cellular phones or turn them on silent mode.*
- *Not to move around in the hall.*
- *Not to eat and drink in the hall.*
- *Not to get up and take photographs during the ceremony.*
- *To limit cheering and ululating to a minimum.*



The words **Cum Laude** indicates in the text below that the diploma or degree is awarded with distinction to the candidate/s listed.

NATIONAL DIPLOMA: INFORMATION TECHNOLOGY (COMMUNICATION NETWORKS)

BHE, Liwa Azola
BOOI, Sakhe
DALASILE, Melikaya
DEBESE, Nwabisa
FUMA, Thandile
GAMNCA, Sinovuyo
GOBIZEMBE, Sinaye Isaac
GOBODO, Mntuyazi
GOGELA, Thabo
GONYELA, Zukisani
HENRI, Orrin Everard
HINA, Anele
JAKO, Nobathembu Luanda
JOBELA, Kuhle
MAGUGU, Athenkosi
MAJIBA, Nomaxabiso
MAKHATHINI, Sphiwo
MAKU, Lelethu

MJEZA, Thembani
MPAKO, Nosikhumbuzo Judy
MSASENI, Yonela
NCOBO, Vuyile Romario
NEL, Paul Francis
NONQAYI, Masiluve
PHILLIP, Yandisa
SITHOLE, Shadrack
TETANI, Yanginkosi
TWASHU, Anam
VUKUTHI, Zuko

CUM LAUDE

BOOI, Asanda
MANTSHONGO, Sandisiwe
QHUBA, Msebenzi

NATIONAL DIPLOMA: INFORMATION TECHNOLOGY (SOFTWARE DEVELOPMENT)

ADAMS, Chandre
BAARTMAN, Kyle Ashley
BARNARD, Chelsea-Leigh
BERGESEN, Jonathan Adam
BERRY, Ryan Scott
BEZUIDENHOUT, Rohann
BLACK, Christopher Kevin
BLOM, Nicholas
BLUNT, Phillip John
BOMVANA, Likho
BOOI, Luleko
BOOTH, Elandre Remano
BOTH, William Malcolm Souris
BOUWER, Nicholas Matthew
CHAMBERLAIN, Henning Johannes
CHOWHAN, Himal
CLAASSENS, Kevin John
COELHO, Jason Tavares
CROSS, Jason Sean
DAVIDS, Lyle
DAVIDS, Marlon Dean
DIKE, Sakhumzi
DLAMINI, Wakhile Ntando
DLOVA, Ayabulela
DOANS, Josh
DOUGLAS, Kirk
DOUGLAS-HENRY, Dylan Stuart
ELLEBABIDY, Said Mohamed Zeyad Mohamed Khalil
FEYT, Heinrich Johann
FIPHAZA, Xola
FORBES, David Tyrone
FOSTER, Adam Mark
GACHAGUA, Lincoln Wachira
GALLANT, Clyde
GILBERT, Zephaniah Dedrick
GWAYI, Lonwabo
GWJJA, Sivenathi
HAWKINS, Declan Mark
HILA, Xabiso
HLATI, Nonelela
HLEFANA, Njabulo Sanele
HUFKIE, Eldon Llewellyn
JOUBERT, Reynard Nripe
JULY, Lonwabo
KEKE, Andile
KERSPAY, Sylvano Christopher

KHOBO, Ayanda
KOYANA, Luthando Akhumzi
LAGARDIEN, Zaahidah
LOKWE, Siphosethu
LOUW, Darren Michael
LOUW, Duncan
LOUW, Janno Dewet
MAHABENI, Siyamthanda
MANGXABA, Yonela
MANI, Mbulelo Mvuyisi
MANONA, Andrew
MAPUMA, Khanyiso
MAVENGANE, Sinxolo
MAYIYANA, Faith Nolukholo
MBEKI, Sandiswa
MBUQE, Apelele Alungile
MDYOGOLO, Ludwe
MKHATSHWA, Mduduzi Lawrence
MNDIYA, Bongiswa Gloria
MQULO, Chumani
NDZANA, Etienne Charles Lebon
NEMBUDANI, Khodani Poppy
NGADA, Okuhle
NGEBULANA, Noncedo
NKUMANE, Godfred Nqaba
NTIMBA, Phumlani Khaya
OLIPHANT, David Lorenzo
OPPERMAN, Gerhard
PAMLE, Sweetness Bongiswa
PEER, Ebrahim Suleiman
PHILLIPS, Christopher Neil
REED, Mitchell Latsky
SADIKI, Denzhelanga
SCHRAM, Clinton
SCHREUDER, Gideon Albertus Johannes
SCHROEDER, Wesley Basil
SEGAL, Cleaven Ryan
SITHOLE, Nicholus
TENGANI, Siyamthanda
VAN DER MERWE, Tiaan Hugo
VAN ZYL, Andries
VELLEM, Onga
VOS, Avuyile Kamvelihle
VOYI, Anathi Kwanele
YEKELA, Pumzile
YON, Ailan Caleb

ZAZA, Sisa
ZIMBA, Zuzeka
ZOZO, Cwenga Nkcubeko

CUM LAUDE

ADLAM, Ryno
BANGANI, Sifiso Matthews
DEYZEL, Wynand
EVEZARD, Ryan Vaughan

HISHIKO, Tulonga Dennis
JONKER, Ryno
JORDAAN, Nicholas
JOYCE, Bevan Eric
LUMKA, Sinovuyo
MASHABANE, Ntethelelo Clyde
MGQWETHA, Ludwe
MHLONGO, Thobekani Prince
NGCAMA, Lwando
VAN NIEKERK, Darryl

NATIONAL DIPLOMA: INFORMATION TECHNOLOGY (SUPPORT SERVICES)

ALLA, Sizwe
DOMINGO, Mark Philip
DOMINGO, Robin
FILA, Thembisa
FREIRE, Eddie Braulio Fernando
GOBINCA, Baxolise
GWATYUZA, Luthando
HEWANA, Wandisile
KALANI, Sivuyile Peter
KASIBE, Asisipho
LEANDER, Clueshai Quwan
MAHLANGABEZA, Thandile
MAJEKE, Asemahle Carol
MALAWANA, Thembela
MANGETE, Siyabulela
MAQUNGO, Matapelo
MARAIS, Rene Natasha
MATSHAYA, Lukhola
MATSOLO, Siyamthanda
MBALEKI, Khulile Tabani
MBETE, Nkanyiso Brighton
MITHIYO, Linda
MOSS, Olwethu

MOYAKHE, Vuyo
MOYANA, Mesuli Simamkele
MYESI, Sinazo
NGAKA, Nokuthula Ruth
NGWEKAZI, Nomthandazo Theodora
NJOKWENI, Makhosandile Gladman
NKOBO, Xolisa
NTLEBI, Thando
PETERS, Kenleigh Linton Lance
PLAATJIE, Zimkhitha
PUWANI, Linda
QOMA, Lulamela
RALAWE, Luxolo
RAMATU, Sihle Sechaba
ROJI, Sbabalwe
SAMMY, Burton Reginald Kenneth
SIGIDI, Vusumzi
TENGISILE, Khanyisa
THEMBANI, Siphosethu
TSHAWA, Odwa
VOS, Somilasonke
ZINGANI, Zimi

BACHELOR OF TECHNOLOGY: INFORMATION TECHNOLOGY (COMMUNICATION NETWORKS)

BODLA, Njongo
FIKELA, Balungile
HALANA, Siphosethu
JANSE VAN RENSBURG, Wiehan
JANSEN, Bevan William
KODISA, Vanencia Lerato
LIPOTSO, Abongile
MASIZA, Wonke Leon
MHLABA, Surety Aleta
MIGGELS, Busisa
MQOKOZO, Siyanda
MTSHAULANA, Sinovuyo
MVUNYISWA, Luvo
NDZONDZO, Asavela
NGQANDU, Ntombebongo Alicia
NYUSHMAN, Aphiwe Vuyolwethu

QUPE, Vuyolwethu
RAUTENBACH, Jaques
REEDER, Neil Devilliers
ROUX, Jean-Pierre
RUBA, Unam
SAUNDERS, Armand
TACHIE, Sidwell Kwamina
TINI, Unati
TSHAMBU, Thembelani
VAN HEERDEN, Juandre Anton

CUM LAUDE

MAHARAJ, Rahul
MPHELA, Ramatladi Sello

BACHELOR OF TECHNOLOGY: INFORMATION TECHNOLOGY (SOFTWARE DEVELOPMENT)

BARNARD, Rocco Armand
BOSMAN, Jacques
BOTHAS, Eugene Gillmer
BROWN, Jared
BROWNE, Alan Christopher
CAMONS, Blaine Dean
CASTIGNANI, Gregg Michael
DOBKINS, Clinton
DORFLING, Kyle

FANA, Siphos Sydney
HAKA, Mpumezo
HENDRICKS, Ilhaam
JACOBS, Daniel
JANSE VAN RENSBURG, Ebenhaeser Otto
JOHANNES, Lee-Ann Chandre
JONAS, Mamlleli Sympathy
JOUBERT, Ben
KUCHERERA, Lean

LANGBOOI, Lerato Luyanda
LIEBENBERG, Cameron Mark
MABOZA, Sixolise
MAGWAZANA, Beauty Yamkela
MAHLAULE, Nyiko
MARAIS, Megan Nicole
MARKGRAAFF, Marco
MASIZA, Athenkosi Leeboy
MDUNYELWA, Vuyolwethu Sizoli
MFEKANE, Xhantlomzi
MGIDI, Yongama
MGWALI, Lulutho
MONAMA, Briner Makgolokgohle
MZILIKAZI, Sibusiso
NCEDE, Siwaphiwe
NCUBE, Stephen Mabuza
NETLEY, Jonathan Peter-Boyd
NGWENZE, Ayanda Niccolas
NOGQALA, Simtembile
NTSIMBI, Prudence Zilungile
NTSINDE, Pambili
NYANGINTSIMBI, Cinga Phiwe
PRETORIUS, Ross Stephen
RAS, Stian

SIKWEBU, Afikile Zubenathi
SMITH, Andre Frank
SMITH, Nino Lujeanne
SONANDI, Ntswaki
SONKOSI, Adadume Wilberforce
SPOTOSE, Khanya
VAN DER MERWE, Calvin Johan
VERMAAK, Gert Petrus
WAIT, Tiaan
WILLIAMS, Travis
ZAMANI, Sibusiso
ZAZA, Zine Faith

CUM LAUDE

CIGLER, Leora Jenny
HENDRICKS, Lloyd Alexander
KING, Chante Ana-May
LENNOX, Nicholas
MAKIBINYANE, Lebohang
MALAHLELA, Peiri Johannes
THOMAS, Robyn Michelle
VAN ANTWERPEN, Cornelius

MASTER OF INFORMATION TECHNOLOGY

DE KOCK, Ryan – **Cum Laude**

Title of dissertation:

A FRAMEWORK FOR IMPLEMENTING BRING YOUR OWN DEVICE IN HIGHER EDUCATION INSTITUTIONS IN SOUTH AFRICA

Supervisor: Prof LA Fletcher

DE LANGE, Joshua – **Cum Laude**

Title of dissertation:

A FRAMEWORK FOR INFORMATION SECURITY MANAGEMENT IN LOCAL GOVERNMENT

Supervisor: Prof R von Solms

Co-supervisor: Prof M Gerber

DELPOR, Petrus Marthinus Jacobus – **Cum Laude**

Title of dissertation:

A FRAMEWORK FOR THE CORPORATE GOVERNANCE OF ICT IN LOCAL GOVERNMENT

Supervisor: Prof R von Solms

Co-supervisor: Prof M Gerber

FANI, Noluvuyo

Title of dissertation:

GOVERNING INFORMATION SECURITY WITHIN THE CONTEXT OF "BRING YOUR OWN DEVICE" IN SMALL, MEDIUM AND MICRO ENTERPRISES

Supervisor: Prof R von Solms

Co-supervisor: Prof M Gerber

KOEN, Ruan – **Cum Laude**

Title of dissertation:

ICT READINESS FOR BUSINESS CONTINUITY IN LOCAL GOVERNMENT

Supervisor: Prof R von Solms

Co-supervisor: Prof M Gerber

MABECE, Thandolwethu

Title of dissertation:

A MODEL TO ADDRESS FACTORS THAT COULD INFLUENCE THE INFORMATION SECURITY BEHAVIOUR OF COMPUTING GRADUATES

Supervisor: Prof LA Futchter
Co-supervisor: Prof K Thomson

MCUBE, Unathi Unity – **Cum Laude**

Title of dissertation:

A MODEL FOR IT RISK ASSESSMENT IN LOCAL GOVERNMENT

Supervisor: Prof M Gerber
Co-supervisor: Prof R von Solms

MENTOOR, Allisson Catherine Ebony

Title of dissertation:

SOCIAL NETWORKING SERVICES IN SUPPORT OF PATIENT CENTRED CARE: A SOUTH AFRICAN PERSPECTIVE

Supervisor: Prof D Pottas

MIYA, Christopher Asanda

Title of dissertation:

A MODEL FOR UNDERSTANDING THE INTENTION TO CHANGE FACEBOOK PRIVACY SETTINGS ON MOBILE PHONES

Supervisor: Prof RA Botha

TEKENI, Luzuko – **Cum Laude**

Title of dissertation:

A MULTI-FACETED MODEL TO SUPPORT AUTHENTICATION AND AUTHORIZATION FOR ONLINE SERVICES

Supervisor: Prof RA Botha
Co-supervisor: Prof K Thomson

MASTER OF TECHNOLOGY: INFORMATION TECHNOLOGY

JACOBS, Gershwin Merlin

Title of dissertation:

USER EXPERIENCE GUIDELINES FOR MOBILE NATURAL USER INTERFACE: A CASE STUDY OF PHYSICALLY DISABLED USERS

Supervisor: Prof D van Greunen

MXOLI, Ncedisa Avuya Mercia

Title of dissertation:

GUIDELINES FOR SECURE CLOUD-BASED PERSONAL HEALTH RECORDS

Supervisor: Prof N Mostert-Phipps
Co-supervisor: Prof M Gerber

DOCTOR OF PHILOSOPHY

KATIVU, Kevin Tatenda
(*Information Technology*)

Title of thesis:

A FRAMEWORK FOR THE SECURE CONSUMERISATION OF MOBILE, HANDHELD DEVICES IN THE HEALTHCARE INSTITUTIONAL CONTEXT

Supervisor: Prof D Pottas

MPEKOA, Noluntu
(*Information Technology*)

Title of thesis:

A FRAMEWORK FOR M-VOTING IMPLEMENTATION IN SOUTH AFRICA

Supervisor: Prof D van Greunen

PETRATOS, Anastasia
(*Information Technology*)

Title of thesis:

AN ICT STRATEGY TO SUPPORT A PATIENT-CENTERED APPROACH TO DIABETES CARE

Supervisor: Prof D van Greunen

TSOKOTA, Theo
(*Information Technology*)

Title of thesis:

AN ICT STRATEGY FOR SUSTAINABLE TOURISM IN ZIMBABWE

Supervisor: Prof R von Solms
Co-supervisor: Prof D van Greunen

DOCTORAL DEGREE CITATIONS

THE DEGREE OF DOCTOR OF PHILOSOPHY (INFORMATION TECHNOLOGY)

KEVIN TATENDA KATIVU

Previous qualifications:

2011	NDip (Information Technology)	Nelson Mandela Metropolitan University
2012	BTech (Information Technology)	Nelson Mandela Metropolitan University
2014	MTech (Information Technology)	Nelson Mandela Metropolitan University

Thesis:

A FRAMEWORK FOR THE SECURE CONSUMERISATION OF MOBILE, HANDHELD DEVICES IN THE HEALTHCARE INSTITUTIONAL CONTEXT

Information-security compliance requires a significant allocation of infrastructure and skilled worker resources, which are scarce in rural communities. As a means of addressing the security challenges, the study culminated in the development of a framework to address the health information-security requirements for the use of mobile computing devices for community-based rural healthcare providers. The framework promotes self-awareness within the rural communities by encouraging the identification and fostering of intrinsic security-conscious practices and behaviours as low-investment controls. These resources can be considered as community healthcare assets; and they can be leveraged from the onset without the need for expenditure.

The research was mainly motivated by the need to address information security in the daily activities of community-health workers operating in resource-constrained communities. The framework adopts a salutogenic approach to address the unique contextual requirements; and it recommends the traditional pathogenic approach to bridge the critical security gaps.

The study falls into the design-science paradigm. The research process incorporates literature reviews focusing on health-information systems' security and identifying the theoretical constructs that support the low-resource-based secure deployment of health-information technologies. Thereafter, the framework is developed and evaluated through a case study and expert reviews.

Ultimately, the solutions that leverage this framework are context aware; they make use of the resources that are available; and they cultivate a secure operating environment in circumstances where information-security compliance is otherwise not feasible – due to the contextual constraints.

THE DEGREE OF DOCTOR OF PHILOSOPHY (INFORMATION TECHNOLOGY)

NOLUNTU MPEKOA

Previous qualifications:

2002	National Diploma: IT	Walter Sisulu University (Eastern Cape Technikon)
2003	Bachelor of Technology: IT	Walter Sisulu University (Eastern Cape Technikon)
2014	Master of Technology: IT	Tshwane University of Technology

Thesis:

A FRAMEWORK FOR M-VOTING IMPLEMENTATION IN SOUTH AFRICA

This study focused primarily on the South African electoral system. Currently, South Africa makes use of the Australian paper-based voting system. This paper-based voting system is slow, convoluted and inaccurate because of human errors; it is costly and largely inefficient. Many other countries have made attempts to replace the traditional paper-based voting system with modern voting technology.

Mpekoa developed a framework that has the potential to enable the successful implementation of mobile voting (m-voting) in South Africa. M-voting systems have the potential to improve traditional paper-based voting procedures by providing mobility, convenience and flexibility to the voter. Very few countries have endeavoured to implement m-voting, in order to improve mobility and simplify the election procedures. Despite several m-voting initiatives reported worldwide; insufficient attention has been devoted to understanding the factors that influence the success or failure of m-voting implementation.

Successful m-voting implementation depends on a number of factors, which may be unique – given the local context in which it is implemented. This research highlighted the different initiatives to be undertaken, in order to promote the development of m-voting in South Africa. It also highlighted the available institutional, legal and regulatory frameworks needed to support m-voting development.

Mpekoa's m-voting framework endeavours to improve the human experiences for voting. This m-voting framework is tailored for the South African socio-economic environment; but it could also be generalised to other countries in the SADC region.

THE DEGREE OF DOCTOR OF PHILOSOPHY (INFORMATION TECHNOLOGY)

ANASTASIA PETRATOS

Previous qualifications:

1987	National Diploma Computer Data Processing	Port Elizabeth Technikon
1989	National Higher Diploma Computer Systems	Port Elizabeth Technikon
1994	Master's Diploma in Technology: Information Technology	Port Elizabeth Technikon

Thesis:

AN ICT STRATEGY TO SUPPORT A PATIENT-CENTRED APPROACH TO DIABETES CARE

In this doctoral thesis entitled: "An ICT strategy to support a patient-centred approach to diabetes care", the candidate has made an essential contribution to the treatment of people with diabetes. Factors, such as poverty, ethnicity, socio-economic status, poor infrastructure and governance are some of the reasons that effective and proven prevention and treatment interventions for most of the major causes of mortality and morbidity in the developing world continue to fail. Chronic diseases require complex interventions, which these countries simply cannot maintain.

ICT was also identified as the ideal medium to address the inaccessibility and inequality of healthcare in South Africa. The pressure on the healthcare system has created an "assembly-line" approach, in which chronic care patients are not given the required attention. Despite the need to incorporate e-health into government's healthcare systems over the last decade, little evidence is seen of this at the point of care. The diabetes endemic in South Africa is exacerbated by the manual functions that are performed in all aspects of monitoring and management of the disease.

This strategy focuses on using the technology available to healthcare workers and patients at the point of service. It does not require any government interventions. It can be implemented immediately, with little training; since the technology used is familiar to both the carers and the patients. The strategy recognises that the patient must be treated with dignity and respect. It is a novel approach that demonstrates the empowerment of healthcare workers and people with diabetes – through the use of technology.

THE DEGREE OF DOCTOR OF PHILOSOPHY (INFORMATION TECHNOLOGY)

THEO TSOKOTA

Previous qualifications:

2003 BScHons (Information Systems)
2009 MBA (Management Information Systems)

Midlands State University
Maastricht School of Management

Thesis:

AN ICT STRATEGY FOR SUSTAINABLE TOURISM IN ZIMBABWE

The purpose of this study was to propose a strategy for the effective and sustainable utilisation of ICT in the tourism sector in Zimbabwe. ICT has been widely acknowledged as having great potential for transforming the tourism sector, in order to boost the tourism sector. However, in Zimbabwe, there is a lack of any apparent and clear strategy for the effective usage and integration of ICT to enhance the tourism sector after its initial adoption.

This research deployed a multi-cross-sectional case-study approach, combining government, the regulator, service providers and international tourists. The study succeeded in providing a theoretical model in an ICT strategy formulation. In addition to the model, the study offered a deep understanding of the factors hampering the use of ICT in the tourism sector in Zimbabwe; and it set out the coherent actions that need to be taken.

The study has contributed to an increased understanding of the application of ICT in the tourism sector of a developing country, which is currently recovering from more than a decade-long economic recession. Furthermore, the study has also contributed to the ICT4D literature; and it has provided an ICT strategy for effective and sustainable development in the tourism sector for appropriate interventions from government and other role-players in the tourism sector.

From a methodological perspective, this research was trans-disciplinary, bringing together the disciplines of tourism, ICT for development, strategic management, information systems and public administration. However, the major contribution of this research is an ICT strategy for sustainable tourism in Zimbabwe.



VISION

To be a dynamic African university, recognised for its leadership in generating cutting-edge knowledge for a sustainable future.

MISSION

To offer a diverse range of quality educational opportunities that will make a critical and constructive contribution to regional, national and global sustainability.

To achieve our vision and mission, we will ensure that:

- Our values inform and define our institutional ethos and distinctive educational purpose and philosophy.
- We are committed to promoting equity of access and opportunities so as to give students the best chance of success in their pursuit of lifelong learning and diverse educational goals.
- We provide a vibrant, stimulating and richly diverse environment that enables staff and students to reach their full potential.
- We develop graduates and diplomates to be responsible global citizens capable of critical reasoning, innovation, and adaptability.
- We create and sustain an environment that encourages and supports a vibrant research, scholarship and innovation culture.
- We engage in mutually beneficial partnerships locally, nationally and globally to enhance social, economic, and ecological sustainability.

VALUES

i. Respect for diversity

- We reflect and serve diverse regional, national and global communities
- We promote an open society where critical scholarship and the expression of a multiplicity of opinions and experiences are actively encouraged
- We foster an environment in which diversity is appreciated, respected and celebrated
- We are committed to accessibility, inclusivity and social justice

ii. Excellence

- We promote, recognise and reward excellence in our teaching, learning, research and engagement
- We promote, recognise and reward excellent service delivery to all our stakeholders
- We provide a supportive and affirming environment that enables students and staff to reach their full potential
- We adopt innovative approaches to promote excellence in our institutional policies, structures, processes and systems

iii. Ubuntu

- We are a people-centred university
- We respect the dignity of others
- We recognise our mutual interdependence
- We promote compassionate and responsible citizenship

iv. Integrity

- We act with integrity and accept responsibility for our actions
- We behave in an ethical and professional manner
- We conduct our activities in an accountable and transparent manner
- We ensure the integrity of our information, systems and processes

v. Respect for the natural environment

- We care about the environment and recognise our responsibility to conserve, protect and properly manage natural resources for ourselves and future generations
- We promote the integration of sustainability principles into our academic practices, institutional operations and design of physical infrastructure
- We encourage mutually beneficial and sustainable approaches to community service and engagement
- We inspire students and staff to embrace environmentally friendly practices

vi. Taking responsibility

- We acknowledge our personal responsibility for ethical behaviour towards others
- We assume responsibility for the achievement of personal and institutional goals
- We accept responsibility for our actions and the consequences thereof
- We provide an environment that encourages students and staff to take responsibility for their academic and professional endeavours

EDUCATIONAL PURPOSE AND PHILOSOPHY

- We provide transformational leadership in the service of society through our teaching and learning, research and engagement activities.
 - To achieve this we are committed to developing the human potential of our staff and students in the full spectrum of its cognitive, economic, social, cultural, aesthetic and personal dimensions in the pursuit of democratic citizenship.
- We adopt a humanising pedagogical approach that respects and acknowledges diverse knowledge traditions and engages them in critical dialogue in order to nurture a participative approach to problem-posing and -solving, and the ability to contribute to a multi-cultural society.
- We inspire our stakeholders to be passionate about and respectful of an ecologically diverse and sustainable natural environment.
- We will be known for our people-centred, caring, values-driven organisational culture that will allow all members of the university community to contribute optimally to its life.

CONGRATULATORY MESSAGE FROM THE ALUMNI ASSOCIATION

Congratulations on your achievement! You are now an alumnus of NMMU. We would like to take this opportunity to introduce you to the NMMU Alumni Association.

Once you have obtained your NMMU certificate, diploma or degree you become an alumnus of the university and a member of the NMMU Alumni Association. The Association is recognised by the NMMU Council as a structure of the University. The Association supports and enhances the realisation of the University's vision and mission through maintaining and expanding positive relationships with its members.

The University can be supported in a variety of ways including sharing news, expertise, skills, networks and contributions in cash and kind. Cash donations to the Alumni Fund are used to fund bursaries, projects and the NMMU Capital and Endowment Campaign. Every contribution makes a difference. Donations can be made online as well.

Join our existing alumni chapters nationally and internationally or help establish new ones to maintain and build our networks. We encourage you to remain active NMMU ambassadors.

The role of the Alumni Relations Office

The Alumni Relations Office is responsible for the day-to-day management and running of the Alumni Association, the University Shop and all matters related to alumni relationship building.

We kindly request all alumni to ensure that we have your latest contact details to invite you to chapter socials and networking events as well as provide you with information regarding alumni and NMMU achievements. You are also requested to send us news regarding your or fellow alumni achievements and interesting experiences for publication in our newsletters and on the website.

Please visit our website for more information <http://alumni.nmmu.ac.za> or e-mail us at alumni@nmmu.ac.za or join our Facebook page **NMMU Alumni**. Other contact details include tel. +27 41 504 3935 and fax +27 41 504 1417. You are also most welcome to visit the Alumni Relations Centre on the North Campus in Port Elizabeth.

Remember to buy your memorabilia from the University Shop during graduation.

We look forward to hearing from you. Stay connected to your *alma mater*!

NATIONAL ANTHEM

**Nkosi Sikelel'i-Afrika,
Maluphakanyisw'uphondo lwayo,
Yizwa imithandazo yethu,
Nkosi Sikelela, thina lusapho lwayo.**

**Morena boloka setjhaba sa heso,
O fedise dintwa le matshwenyeho.
O se boloke, O se boloke setjhaba sa heso,
Setjhaba sa South Africa.**

South Africa.

**Uit die blou van onse hemel,
Uit die diepte van ons see.
Oor ons ewige gebergtes
Waar die kranse antwoord gee.**

**Sounds the call to come together,
And united we shall stand.
Let us live and strive for freedom,
In South Africa our land.**