# NELSON MANDELA

### UNIVERSITY



# Graduation 2019

### Ceremony 12: Faculty of Engineering, the Built Environment and Information Technology (School of Engineering)

Thursday, 11 April 2019, 14:30 Madibaz Indoor Sport Centre, South Campus, Summerstrand

## **ICO YEARS OF MANDELA**

**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 life-changing education experiences for a better world

#### VALUES

Excellence Diversity Ubuntu Social justice and equality Integrity Environmental stewardship



### Contents

Vision, mission, values	
A graduation reflective of our namesake	2
Congratulatory message	3
Nelson Mandela University	5
Fast facts	6
Exciting prospects	7
Office-bearers of the university	9
Executive deans of faculties	9
Order of proceedings	10
Graduates	11
Honorary doctorate recipients Vuyo Mahlati, Sibongile Mhkabela, Morgan Chetty and Frank Chikane	18
Academic dress	22
Faculty colours	23
Congratulatory message from the Alumni Assocation	24
National anthem	

#### Respect for the occasion

# As befitting of this milestone occasion and in respect of all graduates and their families, please could you honour the following:

- All rise and applaud the student procession as it enters the back of the hall.
- All rise when the academic procession enters the hall and remain standing until after the moment of silence and again at the end of the ceremony, after the singing of the national anthem as the academic procession leaves the hall.
- Ensure that your cellphones are on silent.
- Do not walk around the hall or leave during proceedings. Should you need to use the bathroom, please go to the back of the hall where ushers will direct you.
- Ensure that you momentarily suppress your applause while the name of each candidate is announced.

### A graduation reflective of our namesake

Our university is on a transformation journey, ever seeking to advance social justice, equality and inclusion by providing lifechanging educational experiences in pursuit of a better life for all.

Part of our journey in honouring our namesake, is examining what we celebrate and how we do it.

Graduation is the pinnacle of our institutional celebrations – a time when we reflect, acknowledge and celebrate the capping of each and every student.

What you will witness today is the beginning of this graduation transformation journey as we introduce what our students, past and present, our staff and others, feel is apt and fitting of a dynamic African university that carries the iconic name of Nelson Mandela.

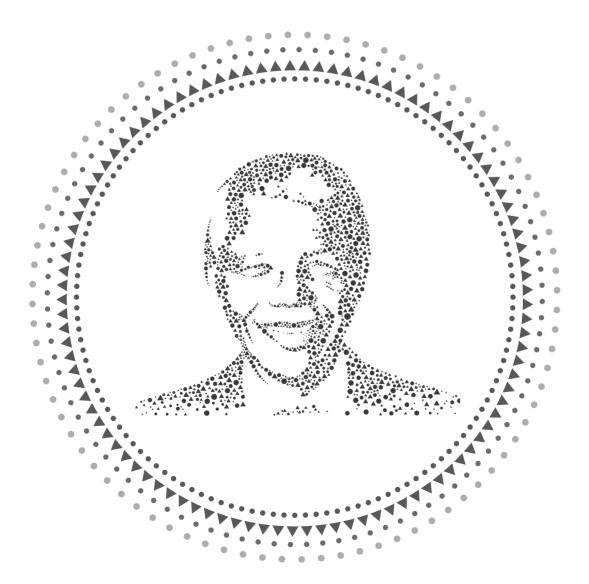
This follows a nine-month process that included online surveys, focus groups and discussions around our university's identity and the rituals, dress, entertainment, format and practices that our graduation ceremonies should aspire to reflect.

This enriching experience has resulted in a number of cocreated innovations for Mandela University – such as the first procession by all graduates into the hall and the addition of a cultural interlude during each ceremony.

Other visual and process adaptions to the previous ceremonies include the addition of a sign interpreter, processional drumming and a new ticketing system.

The latter is a legislative regulation as the university must comply with the public events act in terms of safety and security. To accommodate those who were not privy to receiving a ticket (each graduate is entitled to four tickets), live streaming of the event is screened in an adjacent venue.

The process of introducing new academic gowns for office bearers that are reflective of our identity as Nelson Mandela University is also underway.



### **Congratulatory message**

Graduation is a significant milestone in anyone's life. It is the culmination of an academic journey that reflects your commitment, perseverance, hard work, intellect and sacrifice. We know that the sacrifice and hard work is often not yours alone as many have travelled with you – your friends, your lecturers, your supervisors, your mentors and your family. They have invested in you financially, encouraged you to persevere, guided your studies and above all, believed in your ability to succeed and achieve this graduation dream.

Today your joy is our joy too. Such a significant moment – your graduation day – must be celebrated for it not only recognises all that you have achieved, but focuses on all the potential and possibilities to come. It offers us great hope for the future – for you are that future.

We salute and applaud your achievement and wish you all the very best for your future endeavours.

Never stop learning. Do not let your curious spark die out, for education is not only your passport to the future – but also to the future hopes of our country, our continent and is indeed a foundation for a better world, as Nelson Mandela so eloquently put it:

"Education is the most powerful weapon which you can use to change the world."

**Congratulations!** 



Dr Geraldine Fraser-Moleketi Chancellor



Professor Sibongile Muthwa Vice-Chancellor

#### Ilizwi lokuvuyisana

Uthweso-sidanga yimpumelelo ebalulekileyo kubomi bomntu wonke. Ziziphumo zokufika apho ubusiya khona, ezibonakalisa ukuzimisela nokuzinikela kwakho, ukunyamezela, ukusebenza nzima nobunggondi. Siyazi ukuba ukuzinikela nokusebenza nzima asikokwenu nodwa, njengoko siqonda ukuba bebebaninzi abantu abanikhaphileyo kolu hambo izihlobo, abahlohli, amakhankatha emfundo, abaxhonkxi kwakunye nezizalwane nezalamane. Baye benza indima ngokuthi bafake isandla ngemali, banikhuthaza ukuba ninyamezele, banibonisa indlela xeshikweni nighuba nezifundo zenu, ngaphezu koko konke, baye bakholelwa kwiinzame zenu zokuphumeza amaphupha okuba nesidanga.

Namhlanje olu vuyo lwenu ikwa lolwethu, iintliziyo zenu nezethu zidada emafutheni yimincili nochulumanco - eli thuba libaluleke kangaka, usuku lwakho lokuthweswa isidanga - mayibe lusuku lokubhiyoza njengoko ingelosuku olubonisa impumelelo kuphela, kodwa lujolise kuko konke okuzayo nokuyimpumelelo. Lusinika ithemba elimangalisayo lengomso- nina nilikamva nengomso.

Sinothulela iminqwazi sikwaniqhwabela nezandla ngale mpumelelo yenu, sininqwenelela okuhle kuko konke enikwenzayo nokuzayo.

Ningaze niyeke ukufuna ulwazi. Ningahl'umxhelo weenzame nemigudu zokufun'ulwazi, njengokuba imfundo ingesositshixo sekamva kuphela – koko ikwayiminqweno yekamva yelizwe nezwekazi lethu kwaye sisiseko sehlabathi eliqaqambileyo, njengokuba uNelson Mandela eyibhentsisa ngobuciko:

Imfundo sesona sixhobo sinamandla ongasisebenzisa ukuguqula ihlabathi.

#### Hu-u-untshu!!!

Ukwanda kwaliwa ngumthakathi.

#### Boodskap van gelukwensing

Gradeplegtigheid is 'n belangrike mylpaal in enigiemand se lewe. Dit is die hoogtepunt van 'n akademiese reis wat jou toewyding, deursettingsvermoë, harde werk, intellek en opoffering weerspieël. Ons weet dat die opoffering en harde werk dikwels nie net joune was nie, aangesien baie mense saam met jou die pad geloop het - jou vriende, jou lektore, jou toesighouers, jou mentors en jou gesin. Hulle het finansieel in jou belê, jou aangemoedig om te volhard, jou studies gelei en bowenal geglo in jou vermoë om te slaag en hierdie droom om te gradueer te bereik.

Vandag is jou vreugde ook ons vreugde. Jou gradedag is so 'n belangrike oomblik en dit moet gevier word – nie net omdat dit erkenning gee aan alles wat jy bereik nie, maar ook fokus op al die potensiaal en moontlikhede in die toekoms. Dit bied ons groot hoop vir die toekoms - want jy is daardie toekoms.

Ons wens jou geluk en is saam met jou verheug oor jou prestasie en ons wens jou net die beste toe vir jou ondernemings in die toekoms.

Moet nooit ophou leer nie. Moenie toelaat dat die ondersoekende vonk in jou geblus word nie, want opvoeding is nie net jou paspoort vir die toekoms nie, maar ook vir ons land se hoop vir die toekoms en ons vasteland en dit is inderdaad 'n grondslag vir 'n beter wêreld, soos Nelson Mandela dit so welsprekend gestel het:

"Opvoeding is die kragtigste wapen wat jy kan gebruik om die wêreld te verander."

#### Veels geluk!

### **About Nelson Mandela University**



Nelson Mandela University is the only university in the world to carry the name of Nelson Rolihlahla Mandela.

With this honour comes the responsibilities of leading our university into a new era of transformative innovation, development and change in line with the ethos and values of our namesake.

Living the legacy of Mandela should be reflected in the way we teach, learn, do research, engage with our partners, and work, study and live as staff, students and alumni.

### We are on a journey to achieve this and become the learning destination for staff and students who:

- Are pioneering change agents for a better world;
- Are committed to creating jobs in an entrepreneurial economy;
- Work together across disciplines in seeking solutions and innovations to achieve quality of life and a health environment for all people'; and
- Are instilled with a deep need to serve and give back.

# Fast facts

CAMPUSES

Second Avenue (in Summerstrand), Missionvale (Missionvale), Bird Street (Central), George (George in the Garden Route)



(from certificate through to doctoral qualifications)





(Arts; Business and Economic Sciences; Education; Engineering, the Built Environment and IT; Health Sciences; Law and Science)





- Resource stewardship
- Engaged innovative scholarship
- Transformative institutional culture
- Talented high-performing staff
- Enabling systems, processes and infrastructure



STRATEGIC RESEARCH AREAS



### **Exciting prospects**



#### **Ocean Sciences Campus**

Our new generation university is set to become the leading "go-to" destination in Africa for all marine and maritime teaching, learning, engagement, innovation and research at postgraduate level.

This follows the launch of the Ocean Science Campus in Summerstrand in September 2017 as part of the university's strategic drive to unlock the potential of the blue economy in a sustainable manner to benefit all South Africans.

The development and expansion of our academic programmes will offer new opportunities to all South Africans.

#### Intentional design

The new campus at the former CSIR offices has been intentionally designed and revamped to embrace a transdisciplinary way of working. It has also been specifically branded to reflect its purpose – that of a dedicated creative and innovative hub for postgraduate studies, and its physical spaces revamped to allow scientists from all disciplines to work as teams.

#### Partnerships

This transdisciplinary research strategy does not stop with the academic project. Instead, it also seeks to embrace a 'blue commons' partnership with the metro, local government, big business, civic society and all those who live, work and play at the water's edge and the oceans. It also includes several international partner universities.

By bringing all players together, all basic, formative and applied professional knowledge competencies in Ocean Sciences are exposed, developed and shared in novel ways.

Strategically, this approach offers better options for both discovery research and that of solving real world problems arising from economic need, while always ensuring ecological sustainability.

The university is working on a number of key projects that will strategically position us as an institution of choice for both staff and students.



#### A new medical school

The first phase of the university's exciting journey towards the establishment of the country's 10th Medical School is gaining momentum.

Refurbishment of some buildings on Missionvale Campus is underway as well as the procurement of state-the-art equipment for teaching, learning and research in anticipation of hosting the university's first cohort of 100 medical students.

Various accreditation processes need to be completed – such as approval by the Health Professions Council of South Africa (HPCSA) to teach the MBChB degree in terms of its curriculum, infrastructure and supporting equipment – before the university can officially open the student application process.

#### Innovative teaching model

The university will be using an innovative transformative distributive teaching model that will see students come together to study across health science disciplines and leverage the benefits of technology – all towards their service to society, especially within the metro.

The transformative interprofessional education model (IPE) will see doctors work and study alongside nurses, radiographers, psychologists, environmental health practitioner, pharmacists, emergency medical care students and the like, to offer holistic and integrated health care.

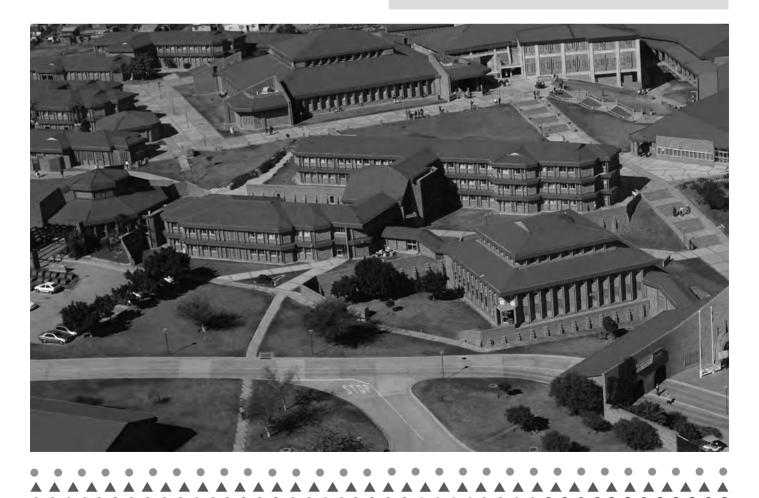
The Faculty of Health Sciences led by Executive Dean Professor Lungile Pepeta has already introduced the transformative model with great success with both students and the communities benefitting from the ongoing partnerships.

The faculty's health care ethos is preventative rather than curative given the dire shortage of qualified health professionals in South Africa. At present, 65% of all public doctor's posts are vacant and there is only one doctor to every 4230 people in the Eastern Cape.

#### Driving the process

A Medical School Infrastructure Working Group is driving the hugely complex implementation plan that also takes the future of Missionvale Campus into account. The campus is in close proximity to Dora Nginza Hospital and a number of clinics.

#### 'Health cannot be a question of income; it is a fundamental human right'



### **Office-Bearers of the university**

#### Chancellor

Dr GJ Fraser-Moleketi: MAdmin (UP), DPhil (hc) (NMMU)

#### **Chairperson of Council**

Ambassador NP January-Bardill: Cert in Ed (UBL), Dip HR Mgt (Damelin), BA (UBL), MA (Essex, UK)

#### Vice-Chancellor

Prof SW Muthwa: BA (SW) (Fort Hare), BA (SW) Hons (Wits), MSc, PhD (London University, UK)

#### Deputy Vice-Chancellor: Institutional Support Mr LE Hashatse: B (Journ & Media Studies), BAHons (RU), MA (Edith Cowan, Australia)

#### **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)

#### **President of Alumni Association** Mr Kwezi Blose: BSc (Building Economics), BScHons (QS) (UPE)

### **Executive deans of faculties**

#### Arts

Prof MJR Boswell: BSocSc, BSocScHons, MSocSc (UCT), PhD (Vrije Universiteit, Netherlands)

#### Business and Economic Sciences Prof HR Lloyd: BCom, BComHons, MCom, DCom (UPE)

#### 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 Graduating Student Procession** (The congregation is requested to rise while the graduating student procession enters the hall)

**Entrance of Academic Procession** (The congregation is requested to rise while the academic procession enters the hall)

**Moment of Silence** (The congregation is requested to remain standing)

#### **Constitution of Congregation and Welcome** Vice-Chancellor

(The congregation is requested to be seated)

#### Choral Item

Nelson Mandela University Choir

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)

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

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

#### HIGHER CERTIFICATE IN MECHATRONIC ENGINEERING

ANDREWS, Shaqeel FRASER, Byron Lee GERBER, Ruan GIJANA, Nomaphelo MASHABANE, Andy MUYANGWA, Munashe Kakenenwa NKONYANA, Sibabalwe SHUNMUGAM, Kaylin Travis TSHIBANGU, Ehoke Daniel TUNZI, Babalo Lwandile

#### CUM LAUDE

MBHELE, Ntokozo THAANYANE, Nceba Elliot

#### NATIONAL DIPLOMA: ENGINEERING: CIVIL

ANGUZU, Michael Wilson Edyangu BABA, Yonela BENDLELA, Ntlanzeko Phinda BESTER, Pasquin Ralph BODLANI, Zizibele CHOABI, Boitshoko DAVIES, Marcelle Carriston DIDLOFT, Alioran Edward DUDULA. Emihle Candulwandle ELLIAS, Kenneth Ricardo FOKWANA, Xolisa GEORGE, Danyele Lauricay Allison **GROBLER**, Nicolaas Johannes Hermanus JILA, Anthony KEITHEILE, Benjamin Onkabetse KGOHLOANE, Khulong Lucky KUTER, Robert Norman LEDWABA, Kagisho Mphologa LETUKA, Retshedisitswe, Thuto LOUW, Llewellyn Marshall MAFHUWA, Phophi Glen MANYATI, Bazisiwe MAQUTYANA, Anelisiwe MATSAU, Tlotliso Sinovuyo Pernell MATYILA, Sisipho Sesethu MAZIBUKO, Sazi MBOYI, Thandokazi MBUYAZI, Lindokuhle MDITSHWA, Lwando MKHETSHANE, Xolisa MPHAHLELE, Gcinashe Lithalethu MWESIGWA, John NCHEKA, Nelisiwe NOVEMBER, Masakhane NOWALA, Sbulele NTSALUBA, Sinawo PLAATJIES, Darryn Graham RANDALL, Cyle Jéan RUDDY, Justin William SEHLABELA, Ashley Josias SEKELE, Mary-Jane Raisibe

•

 SEQUEIRA, Isabela Carly SWAPI, Nozuko Phuthikazi VIKILAHLE, Victor Velelo WRIGHT, Darren James XATE, Ntsikelelo Phumelelo

#### NATIONAL DIPLOMA: ENGINEERING: ELECTRICAL

AFRIKA, Niclint BARNARD, Edden BOSHOFF, Leandrè Pieter BOVUNGANA, Phikolomzi CAMERON, Gerard Brian DIDIZA, Phumza Faith DUBE, Nobuhle FATMAN, Luphelo FROST, Daniel Graham **GEELBOOI**. Boitumelo Vincent **GESWIND**, Clint Philip GODUKA, Zukile HIMUNZOWA, Elijah Himulambo HLATI, Siviwe IMMELMAN, Brandon Grant JACOBS, Brendan Wesley JAKO, Sihle JOUBERT, Andries Johannes KETSIWE, Abongile Lonke KOBO. Mthetho Dion LUMA, Odwa MAFENUKA, Tanduxolo MAHLANGENI, Lavela MAI, Christopher MAKASHANE, Nthoriseng MAKOLA, Serana Evan MANNIE, Talisa MAYEZA, Masonwabe MBANE, Sibonokuhle MDLIVA, Gideon Ludwe MFINIZA, Kwalunga MHLANA, Siboleke MLINDELWA. Sifiso MNDIYA. Siphelele Joseph MPAME. Sivabulela Mihlali MPHUTHUNYWA, Monwabisi MQUQU, Sixolisiwe MSI, Mawande MSIZA, Mthokozisi Panwell NALANA, Luvuyo NDLOVU. Ricar NDUNGE, Abulele Chumasande NKOANA, Alpheus Matome NONJOVA. Unathi NTANGA. Angela PHILLIPS, Cuan Nathan PLATYIE, Zukisani Artwell POTGIETER, Cornelius Gerhard QAWA, Siphokazi QOTOYI, Direko RANGANA, Thina RAUTENBACH, Charl RENENE, Lunga SABA, Batho Mzuvelile SAM. Zandile Bulelwa SETOABA, Eulenda Thuli SIQENDU, Siphesihle

. . . .

 ••

SOCI, Lutho Tyson SOQINASE, Mzingisi Michael STRIDE, Cyndolene Charnell TANDANTO, Sibusisiwe TYELO, Mdumiseni Clement WAINWRIGHT, Hyrum XIVA, Somila

#### CUM LAUDE

MUKALAY, David Ilunga

#### NATIONAL DIPLOMA: ENGINEERING: INDUSTRIAL

BAYIBILE, Nkosi Phendule Slovo BOLOSHE, Kamva Cyril BONEPARTE, Dennelicia Herisha DE MAAR. Faiek GALADLA, Nasiphi Qawekazi HLANGANYANA, Siphenathi KIRBY, Peter-Basil MAFUMANA, Lwenzo Bruce MATO, Odwa MHLONGO, Sindi Belinda MODIAKGOTLA, Siyamkela Thato MSAPA, Treasure Hlulani MUNNIK, Charlin Faith NAIDOO, Vivek NCANYWA, Simphiwe Nicholas NGONDO MAPITSHI, Elie NJADAYI, Ayabulela NOFEMELA. Mbulelo Keith NQAKULA, Sikelelwa NTALO, Yonga PETELA, Lwazikazi QUDE, Akholiwe SAMIE, Luqmaan SIYANGAPHI, Indiphile SPALDING, Tina Otto TSHETSHE, Sakhumzi Reginald TSOEU, Tsoeu Morgan TYUMRE. Mpendulo VUKE, Lizo WAKABA, Baxolile WILLIAMS, Philip ZONDANI, Anivuyina

#### CUM LAUDE

COERTZE, Juan MBAMBOSI, Mangaliso Vuyisa MFOKAZI, Kanyisa Yamkela NINAN, Abel SCHOEMAN, Nicole Therese SELOANE, Tarryn Leigh

#### NATIONAL DIPLOMA: ENGINEERING: MECHANICAL

.

. . . . .

. . . . .

.

ADAMS, Alec BACA, Phelelani BIKIWE, Portia BLAKEY-MILNER, Byron DOLOMBA, Mhlangabezi DUMINY, Francois-Jean

. . .

 FILA, Lindokuhle Fiona GANGATELE, Phumlani GUDMANZ, Matthew Damon HENRY, Matthew John HOUGAARD, Jacques Martin JORDAN, Christopher John JOSAYI, Aphiwe KULA, Sisabulela LANDU. Khanviso LENGOLO, Thato MABUZA. Banele Sonkhe MAGAZI. Phaphama MAMIDZHA, Ndinannyi MATJEKE, Amogelang Petronella MATTHEE, Jaco Jacques MATUTU, Sinomta MBANE, Lithalethu Thobeka MKOYANA, Esethu MLOBELI. Zozibini MOOLMAN, Izak Hendrik NGODWANA, Litha Samkele NXELE. Luvolo Allen Phakama PAMALA, Hlumelo SHAIKH, Junaid SIKRITSHI, Siphosethu SISWANA, Bongo SMITH, Aston Brad STEYN, Brett Luke SUFEYAN, Tawfeeg Achmat TAYLOR, Kyle Joshua VANDALA, Lubabalo WAIT. Brian ZUMA, Marcus Noel

### NATIONAL DIPLOMA: OPERATIONS MANAGEMENT

ABRAHAMS, Shukrey ARNOLDS, Donovan Christo BAINES, Melvin BREEDT, Bernard COOMBS, Lucian Romagno FOSTER, Mandlakayise Charles HOTE, Mncedisi Christopher LUCAS, Tyran Donovan LUDICK, Llewelyn John MAGOBIYANE, Masixole MAKULENI, Anestus Baliso MASEKWANA, Bulelwa MBANE, Thembekile MILLICAN, Justin MPENGESI, Ntombiyam Ismerly MPOFU, Sitsaba MSELANA, Sipokazi MTELELO, Thembalihle NIEMAND, Darryn NQARI. Ncedisa PATEL, Faizel PEREIRA, Adon Christopher PUTUMANI, Anelisa Austin **QUSHEKA**, Sivuyile Emmanuel RATSHOTHE, Lutendo SILVA, Byron Leon STAMPER, Sibabalwe STUURMAN, Terrence TOMAS, Mxolisi

VILJOEN, Ruchdach WICOMB, Damien Marshall ZEALAND, Benita Michelle

#### CUM LAUDE

ERASMUS, Enrique Wentworth FOURIE, Grant JANSE VAN RENSBURG, Christopher LUYT, Irak Zachary PATHER, Christopher VERMAAK, Thampson Brumilda

#### BACHELOR OF ENGINEERING IN MECHATRONICS

ADAMS, Ashrick Roberto BAE, Ji Eun CULL, Tristan Cuchulain Bryan DOUGLAS-HENRY, David Lloyd DU PREEZ, Jacques Francois DU TOIT, Franco Ockert EGLING, Marrion Stephen FERREIRA, Martin Gordon GAJJAR, Kanushka **GELDENHUYS**, Devon Michael GOPICHAND, Shaish HOOSEIN, Nureen ILLENBERGER, Dominic Christopher KIMA, Liombe Luma KRITZINGER, Albert Kahl LAATZ, Bradley James LE ROUX. Francis Anne MARAIS, Aubrey Heinrich MOODLEY, Deenolan MYATAZA, Odwa PURDON, Kyla RAMBELANI, Muano Clifford SOUNDARAJAN, Moksham STOKELL, Matthew Paul-Daniel STOLTSZ, Walter Herman SZANA. Tibor VAN DER WESTHUIZEN. David Eduard VAN RENSBURG, Hans Hoepfner YOTSI, Lithalethu

#### CUM LAUDE

**KIRTON**, Richard James

#### BACHELOR OF TECHNOLOGY: ENGINEERING: CIVIL

ALI, Ibrahim Ali Abud (Urban Engineering) BHAMJEE, Zainab (Urban Engineering) GERBER, Ruan (Urban Engineering) HLOMENDLINI, Buchule Mnonopheli (Urban Engineering) MAKWEDINI, Sihle (Urban Engineering) MGILANE, Vincent Aviwe (Urban Engineering)

MGILANE, Vincent Aviwe (Urban Engineering) MOORE, Celvan (Urban Engineering) MULONDO, Vhonani

(Transportation Engineering) NAUDE, Barry Craig (Urban Engineering) NQIWA, Sinawo (Urban Engineering)

 $\bullet$   $\bullet$   $\bullet$   $\bullet$   $\bullet$   $\bullet$ 

 NXADI, Zintle (*Transportation Engineering*) VAN DER WESTHUIZEN, Emile Joubert (*Urban Engineering*) VAN DER WESTHUYZEN, Rhys George (*Urban Engineering*)

#### CUM LAUDE

NIEFTAGODIEN, Nurudeen (*Transportation Engineering*) OBERHOLSTER, Jacobus Johannes (*Urban Engineering*) SCHEEPERS, Juan-Pierre (*Transportation Engineering*)

#### BACHELOR OF TECHNOLOGY: ENGINEERING: ELECTRICAL

BABY SHAJU, Aldrin BENGEZA, Siyanda FANI, Sivuyile Kennelworth MBAMALI, Nokwanda Philile Sibonelo SKONGWENE, Aphelele TERBLANCHE, Roann

#### BACHELOR OF TECHNOLOGY: ENGINEERING: INDUSTRIAL

LANGENI, Zukile Mahlubi Albert MASWANA, Abongile Pearl MUNYAI, Murendeni MYATAZA, Sinetemba NATHOO, Harshal PIKE, Jon-Marc

#### BACHELOR OF TECHNOLOGY: ENGINEERING: MECHANICAL

NKOSI, Mthokozisi Chamberlain OOSTHUIZEN, Johan Andre

### BACHELOR OF TECHNOLOGY: OPERATIONS MANAGEMENT

JACOBS, Sindiswa KAKAZA, Melikhaya Theophillus MULLER, Dianne Christelen NKEWU, Thabisa Veronica OOSTHUIZEN, Roscoe Clyde SMITH, Jimmy

#### **BACHELOR OF TECHNOLOGY: QUALITY**

ADAMS, Zuko MEKULA, Welcome Samkelo MGIJIMA, Xolani

#### **MASTER OF ENGINEERING (RESEARCH)**

VAN TONDER, Ruben Renier - *Cum Laude* (*Mechanical*) Title of dissertation: *THE DEVELOPMENT OF AN OPTIMISED LOW COST SOLAR AIR HEATING SYSTEM USING EVACUATED TUBES FOR INDUSTRIAL PROCESS HEAT* 

Supervisor: Prof RL Phillips Co-supervisor: Mr K Du Preez

#### MASTER OF ENGINEERING IN MECHATRONICS (RESEARCH)

DYASON, Winston Title of dissertation: INTEGRATION OF A FLY-BLY-WIRE CONTROL SYSTEM FOR LANDING REMOTELY PILOTED AIRCRAFT SYSTEMS

Supervisor: Prof TI Van Niekerk Co-supervisor: Prof RL Phillips Co-supervisor: Prof R Stopforth

HARVEY, Luke Gareth Title of dissertation: A MONITORING AND CONTROL SYSTEM FOR AN ACCELERATED WEATHER TEST CHAMBER

Supervisor: Prof TI Van Niekerk Co-supervisor: Dr T Wilm

SETTY, Kiran - *Cum Laude* Title of dissertation: *IMPROVEMENT AND OPTIMIZATION FOR A FUNCTIONAL LOW-COST PROSTHETIC HAND* 

Supervisor: Prof TI Van Niekerk Co-supervisor: Prof R Stopforth

SEWELL, James Alderton - *Cum Laude* Title of dissertation: *VISION-BASED AUTONOMOUS AIRCRAFT PAYLOAD DELIVERY SYSTEM* 

> Supervisor: Prof TI Van Niekerk Co-supervisor: Prof RL Phillips Co-supervisor: Prof R Stopforth

MASTER OF TECHNOLOGY: ENGINEERING: MECHANICAL (RESEARCH)

JIRANI, Saulos Landwell Title of dissertation: MECHANICAL PROPERTIES OF TITANIUM GRADE 2 TO DHP COPPER BUTT WELDED LASER JOINTS

Supervisor: Prof H Lombard

MABVEKA, Greystone Graham Title of dissertation: LASER WELDING OF THIN WALLED STAINLESS STEEL TUBING

Supervisor: Prof H Lombard

#### DOCTOR OF PHILOSOPHY IN ENGINEERING

ABDULKADIR, Lukman Niyi (*Mechatronics*) Title of thesis: *OPTICAL SURFACE QUALITY AND MOLECULAR DYNAMICS MODELLING OF ULTRA-HIGH PRECISION OPTICAL SILICON MACHINING* 

Supervisor: Prof K Abou-El-Hossein

MKOKO, Zwelinzima Andrew (*Mechatronics*) Title of thesis: *ULTRA-HIGH PRECISION MACHINING OF OPTICAL ALUMINIUM (RSA-443*)

.

 .

 . . . . .

Supervisor: Prof K Abou-El-Hossein

TSIKAYI, Davies Shamiso (Mechanical) Title of thesis: INFLUENCE OF LASER SURFACE TREATMENT ON RESIDUAL STRESS DISTRIBUTION AND DYNAMIC PROPERTIES IN ROTARY FRICTION WELDED Ti-6AI-4V COMPONENTS

Supervisor: Prof DG Hattingh Co-supervisor: Dr A Steuwer

 $\bullet \bullet \bullet \bullet$ 

• •

### THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGINEERING (MECHATRONICS)

#### LUKMAN NIYI ABDULKADIR

#### **Previous qualifications:**

2005 BEng2014 MSc (Production Engineering)

University Bauchi, Nigeria University Bauchi, Nigeria

#### Thesis:

OPTICAL SURFACE QUALITY AND MOLECULAR DYNAMICS MODELLING OF ULTRA-HIGH PRECISION OPTICAL SILICON MACHINING

Hard and brittle materials, such as optical silicon, are widely used in optics, aerospace, and control systems manufacturing. Thanks to their excellent physical and mechanical properties. However, these materials display poor manufacturability due to their hardness and brittleness. They demonstrate nonlinearity during optics making and are experimentally difficult to analyse at the nanoscale level at which the selection of manufacturing parameters is extremely complicated. Improper selection of manufacturing parameters at the nanoscale level may lead to low quality silicon optical lenses in the form of subsurface damage, dislocations and surface micro-cracks. With the use of molecular dynamics (MD), which is a nanoscale modelling technique, a proper selection of process parameters and tool geometry for ultra-high precision diamond turning of silicon optical lenses can be realised. This results in the production of high-quality optical surfaces having nanometric roughness indicator below 8 nanometers.

Prof K Abou-El-Hossein

### THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGINEERING (MECHATRONICS)

#### **ZWELINZIMA ANDREW MKOKO**

#### **Previous qualifications:**

1985 NDip (EMC)

1989 National Higher Diploma: Engineering: Mechanical

1997 MSc (Manufacturing Engineering)

Port Elizabeth Technikon Port Elizabeth Technikon Coventry University, UK

#### Thesis:

ULTRA-HIGH PRECISION MACHINING OF OPTICAL ALUMINIUM (RSA - 443)

The study was conducted to analyse the effects of varying machining parameters, namely speed, feed and depth of cut when ultra-high precision diamond turning a rapidly solidified aluminium alloy RSA 443. The rapidly solidified alloys have become materials of interest in the optics industry. RSA 443 alloy has much improved mechanical strength and other properties. However, RSA 443 possess unique challenges to precision diamond machining due to the presence of high level content of hard silicon particles. The results of this study have shown promising findings that will enhance machinability of RSA 443 and thus improve its application in manufacturing of optical components.

Supervisor: Prof K Abou-El-Hossein

### THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGINEERING (MECHANICAL)

#### **DAVIES SHAMISO TSIKAYI**

#### **Previous qualifications:**

2012 NDip (Mechanical Engineering)2013 BTech (Mechanical Engineering)2015 MTech (Mechanical Engineering)

.

Nelson Mandela Metropolitan University Nelson Mandela Metropolitan University Nelson Mandela Metropolitan University

#### Thesis:

INFLUENCE OF LASER SURFACE TREATMENT ON RESIDUAL STRESS DISTRIBUTION AND DYNAMIC PROPERTIES IN ROTARY FRICTION WELDED Ti-6AI-4V COMPONENTS

The research explored the potential of increasing the endurance limit by laser surface modification as a post weld processing technique for Rotary Friction Welded Titanium components. The study characterised the microstructural effects, the depth and magnitude of residual stresses induced and explained the gain in fatigue life by performing laser surface modification. The primary reason for the increase in the endurance limit of the laser modified samples related to shifting the crack initiation sites to lower stressed regions of the treated samples. In this way laser surface treatment assisted in the optimisation of a solid state joining methodology for small near net shape complex geometry components.

> Supervisor: Prof DG Hattingh Co-supervisor: Dr A Steuwer

### Honorary Doctoral Recipient Dr Vuyo Mahlati – Doctor of Philosophy (Honoris Causa)



Born in the Eastern Vuvo Mahlati Cape, started her education at a farm school where her mother taught, and later went to a missionary boarding school for her higher education. This is where her passion for seeking alternatives to the oppressive education system of the time began, choosing to be an agent of change.

Vuyo obtained her PhD from the University of Stellenbosch with her thesis focusing on the role of value chains in

mainstreaming rural entrepreneurs into global markets. She later trained as a policy specialist at the London School of Economics in the UK.

Her life as an activist was enabled by education, commencing her career as a young researcher in disability, children and women issues and later as a business linkage mentor at the Small Business Development Agency (SBDA). This led to her participation in South Africa's Constitution-making research process after the release of former President Nelson Mandela from prison. Dr Mahlati was also involved in the first UNICEF Status on Women and Children report in South Africa.

During this period, and as part of her research, she visited Zimbabwe, received by Joshua Malinga, disability activist and then mayor of Bulawayo, interviewing other leaders who exposed her to Zimbabwe's change agenda and indigenisation. Seeing the possibility of redress, gave her new insights and inspiration and she returned home to register her own consultancy, allowing her to frame and drive the change agenda.

In the mid-2000's, Dr Mahlati convened the technical team that facilitated the launch of the India Brazil South Africa (IBSA) Women's Forum, premised on the call for "an inclusive macroeconomic framework". This culminated in the signing of the Memorandum of Understanding in India in October 2008, by the three heads of state.

In March 2009, she was a South African delegate and Technical Advisor for the Presidency to the United Nations Commission on the Status of Women, where she presented on the financial crisis theme. This enhanced South Africa's contribution to bringing urgency and intensifying the global call for inclusive economic growth and development.

In May 2010 Dr Mahlati was appointed by the President to serve for a period of five years, as one of the inaugural members of South Africa's National Planning Commission. In September 2018 she was appointed by the President to Chair the Advisory Panel on Land Reform and Agriculture.

Her directorships are many and include previously chairing the South African Post Office (including the Postbank) membership of the Financial Markets Advisory Board and Financial Services Board Licensing Committee. She previously served two terms as President of the International Women's Forum (IWF) South Africa, and is currently the global director of the IWF Board and Co-Chair of the IWF Presidents' Council.

Dr Mahlati's entrepreneurial experience includes participation in major business ventures that include the listed Sasol Oil. As a social entrepreneur, she owns Africa's first indigenous goats cashmere processing plant in Butterworth, Eastern Cape, and through this initiative has helped revive the clothing and textile industry using inclusive rural value chains. She serves as President of the African Farmers Association of South Africa (AFASA) and is a member of the IDC Agroprocessing Competitiveness Fund.

She has been a recipient of the Black Management Forum Presidential Award, as well as the Black Business Executive/ ABSA Kaelo (guidance and wisdom) Award and in 2014, received the Mail and Guardian, Southern Africa Trust Individual Award for Drivers of Change.

For her contribution to bringing urgency and intensifying the global call for inclusive economic growth and development, and to her scholarship and praxis of entrepreneurship and economic development, particularly in marginal rural economies, it is an honour for Nelson Mandela University to confer the degree of Doctor of Philosophy (honoris causa) on **Dr Vuyo Mahlati**.

### Honorary Doctoral Recipient Sibongile Mkhabela – Doctor Of Philosophy (Honoris Causa)



Sibongile (Bongi) Mkhabela, a social worker by profession and a passionate social activist by orientation is the current Chief Executive Officer of the Nelson Mandela Children's Fund as well as the Nelson Mandela Children's Hospital Trust.

Her first steps as an activist were intuitive rather than political; as a child she recognised and questioned the banal and common indignities that shaped black lives. Bongi later became a student leader and was part of the driving force behind the nation-wide June 16,

1976 student revolt, a turning point in South Africa's antiapartheid struggle.

She was charged with 10 other students for sedition in what became known as the "Soweto 11" Trial. In 1981, six years after the 1976 protests, she was finally released. Time spent in the women's prison resolved her commitment to fighting for the dignity of black lives and strengthening the position of African women.

Bongi was trained by The Legal Resources Centre as a para-legal and founded the Zola Advice Office offering practical, social and para-legal advice and assistance to people living under the rule of an oppressive state. Building on her work at Zola, she proceeded to establish the National Advice Centre's association advocating for women's rights.

After the completion of her graduate studies, she headed up the Development Resources Centre which drove research aimed at creating an enabling environment for civil society. The work led to the formation of the SA Non-Governmental Organisations Council and contributed to the formation of the National Development Agency.

Part of that experience saw her work in senior positions for the United Nations Development Programme; serve the first democratically elected government as a Director in the Office of Deputy President Mbeki responsible for programming with specific reference to civil society-government partnerships as well as overseeing the implementation of the UN Children's Charter.

In her tenure as CEO of the Nelson Mandela Children's Fund, Bongi embraced Nelson Mandela's mission to change how society treats the African child and in the last decade, has been on a journey to ensure that the county's children have access to world-class tertiary healthcare and institutions devoted to their care. She led the Nelson Mandela Children's Hospital Trust's, R1b capital campaign for the building and equipping of the Nelson Mandela Children's Hospital. The Hospital is the second of its kind in Southern Africa and provides, state-of-the-art tertiary paediatric care and aims to improve the quality of paediatric research and training in Sub-Saharan Africa.

A graduate from the University of Zululand she is also a Joel L. Fleishman Civil Society Policy Fellow at Duke University in North Carolina, USA, and completed her post-graduate Business Management studies with the University of the Witwatersrand Business School in Johannesburg. In 2017, Mkhabela was awarded a Rockefeller Foundation Fellowship in Italy, a residency to reflect and write on her experiences and the future of social justice movements.

In April last year, Bongi was awarded The National Order of Luthuli (Silver) by the President of South Africa, Mr Cyril Ramaphosa. She serves on various boards, including Senegal-based Trust Africa and the USA-based Global Philanthropy Alliance. She recently stepped down (after 12 years of service) from Barloworld, a listed global company where she served, among others, as Chairman of the Ethics and Transformation Committee.

Her novel Open Earth and Black Roses recounts the ordinary and extraordinary tales of black families in Apartheid South Africa and she tells her personal experience as a young woman imprisoned, restless and resisting social injustice.

In recognition of her fight against apartheid; her continued work in social justice and for her excellent contribution to the well-being of South Africa's children, it is an honour for Nelson Mandela University to confer the degree of Doctor of Philosophy (honoris causa) on **Sibongile Mkhabela**.

### Honorary Doctoral Recipient Reverend Frank Chikane – Doctor of Philosophy (Honoris Causa)



Reverend Frank Chikane matriculated from Orlando High School in Soweto in 1971 and proceeded to the University of the North (Turfloop), now the University of Limpopo, in 1972 to study science.

Following the Frelimo Rally in 1974 which lead to the arrest of student leaders, and forced some students into exile, Chikane was made leader of the Student Aid Committee which played the role of the SRC. He gave evidence on behalf of the students at the Snyman Commission on

the unrest on campus, and due to his role as a leader, was advised not to return to the university for his own safety.

After leaving university he taught Mathematics and Physical Science at Naledi High School in Soweto, but the Security Police put pressure on the school to force him to leave. He then joined Christ for all Nations (CFAN) in 1975, convinced of God's calling in his life. Again, the security establishment threatened CFAN and he left to work as an evangelist with his church, the Apostolic Faith Mission (AFM). In 1979, he completed his training as a pastor at the AFM and was ordained in March 1980. He was subsequently defrocked in 1981 due to his political involvement and reinstated with an apology nine years later in 1990.

Chikane was detained and severely tortured on various occasions between 1977 and 1982. He was part of the founders of the United Democratic Front (UDF) and served as its Vice-President from 1983 to 1985. In February 1985 he was arrested, charged and tried for treason with sixteen other leaders of the UDF, including Albertina Sisulu, and was acquitted in December of the same year. He later continued his education, obtaining a master's degree in Religious studies from the University of Natal (now Kwa-Zulu Natal) and a master's in Public Administration from the Kennedy School of Government, Harvard University.

He served as a Co-ordinator and then Director at the Institute of Contextual Theology (ICT) from 1981 to 1987 when he was appointed General Secretary of the South African Council of Churches (SACC), replacing Dr Beyers Naudé. He had the task of carrying the organisation through the most challenging times characterised by the worst forms of repression, gross violation of human rights and violence. Following the bannings and restrictions imposed on most organisations in 1988, the SACC became the only voice of the people. Consequently, its Headquarters was bombed and Chikane's clothes were laced with a chemical weapons substance which nearly led to his death. He played an important role during the negotiation period, and transition from apartheid to a democratic South Africa, including serving as a Commissioner of the Independent Electoral Commission (IEC) which ushered in the new democratic order. Chikane's influence in the 1980s and the 1990s cannot be overstated.

He became a Special Advisor to Deputy President, Thabo Mbeki, in 1995; was appointed Director General in the Office of the Deputy President in 1996, and a Deputy Secretary of the Cabinet in 1998. After the 1999 elections he was appointed Director General in the Presidency and Secretary of the Cabinet, where he remained until 2009. He was also elected to the National Executive Committee (NEC) of the ANC in 1997.

He has published several articles and books including his 1988 autobiography No Life of My Own, his 2012, Eight Days in September: The Removal of Thabo Mbeki, which was preceded by the so-called 'Chikane Files' published in several Independent newspapers, and his 2013, Things That Could Not be Said.

Other positions and accolades bestowed on Rev Chikane include his appointment as a Senior Research Fellow in the Department of Religious Studies at UCT, President of the AFM International, the Swedish Diakonia Peace Prize for Outstanding Theology Contribution for Justice and Peace in SA and the Peace and Freedom Prize from the Swedish Labour Movement. He has served in various boards of companies and continues to do so. He now serves as Moderator of the Churches Commission on International Affairs (CCIA) of the World Council of Churches (WCC) which deals with conflict areas globally.

For his contribution as a servant leader, his tireless pursuit of justice, peace, conflict resolution and reconciliation; establishing the architecture of democratic governance in a post-apartheid state; developing and promoting the vision of the African Renaissance and consistently placing people at the centre of socio-economic development, it is an honour for Nelson Mandela University to confer the degree of Doctor of Philosophy (honoris causa) on **Reverend Frank Chikane**.

### Honorary Doctoral Recipient Professor Morgan Chetty – Doctor of Philosophy (Honoris Causa)



Prof Mohambry (Morgan) N Chetty has been at the helm of Family Medicine for about 40 years. He has dedicated his life to promoting access to quality healthcare, with a focus on the poor, and being patient-centered.

He obtained his MBChB from the University of Natal and has completed numerous other medical qualifications from both South African and American institutions. Healthcare in the private sector was in chaos. It was divided on ethic

lines, a huge public/private divide, poorly coordinated and very system-centric, health professional and hospi-centric focused.

In 1998, he single-handedly raised funds and gathered doctors together to start the first truly democratic doctor organisation, The South African Managed Care organisation. He was elected as the Vice-Chairperson and he still holds that position today. The ethos was to bring doctors together to be cost-efficient, to be custodians of our scarce resources and to deliver holistic quality care. He was also instrumental in the erection of one of the first Black owned hospitals postapartheid in Durban, Mount Edgecombe Hospital.

There was a need to bring together ethically divided healthcare practitioners in South Africa and once again, Prof Chetty led the team to establish an umbrella organisation, the Independent Practitioners Association of South Africa. This was the turning point as the country saw doctors unite for the common purpose of "caring" for patients, managing scarce resources and striving for quality outcomes. Prof Chetty is the Chairman of the IPA Foundation of SA (Independent Practitioners Association) and is also the Chairman of the regional IPA – The KZN Doctors Healthcare Coalition.

He was awarded the Faculty of Family Practitioners Fellowship

for his outstanding work amongst Family Practitioners by the College of Medicine in SA and won a Fullbright Humphrey Fellowship to the USA in 1993 where he obtained a Master's in Public Health at Tulane University in New Orleans.

Prof Chetty has written over 80 articles and columns on healthcare for various national and international medical journals and publications. He is also regularly involved in radio and TV interviews and is often quoted in the press. Prof Chetty is the author of two books on "Managed Health Care".

He has organised the Africa Healthcare Congress in SA for the past six years and most recently, was involved in the organising of the Africa Health Business Symposium, bringing together high-ranking health officials from Africa and abroad to debate the issue of universal healthcare in Africa.

In 2018, he was appointed by the Minster of Health to the NHI (National Health Insurance) GP Contracting Committee and also onto the Board of the "Office of Health Standards Compliance" (OHSC). This body will accredit all facilities, providers and other health establishments to work for the NHI Programme.

Prof Chetty is a member of the International Academy of Quality and Safety (IAQS) and on the Patient-Centered Committee to drive the paramount role of the patient in healthcare decisions - membership of the Academy is one of the highest honours that an Individual working in the area of Quality and Safety can achieve. In addition, he was also appointed as an ISQua (The International Society for Quality in Health Care) Expert Member.

He was recently awarded the Discovery Health Lifetime Achievement Award for work in the quality of healthcare, Lifetime Membership to the International Academy of Quality and Safety (IAQS) and received the Dr Humphrey Zokufa, Titanium Lifetime Achievement Award (BHF) – for Significant Contribution to the Healthcare Industry over time.

For his contribution in upskilling doctors in South Africa, leading 5000 primary care doctors and the empowerment of patients on patient rights, it is an honour for Nelson Mandela University to confer the degree of Doctor of Philosophy (honoris causa) on **Professor Morgan Chetty**.

### Academic dress

Special academic attire was designed for office bearers at Nelson Mandela 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 meticulously selected to signify a particular office; this is a tradition that is consistent with leading universities throughout the world.

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

Academic dress for graduates at Nelson Mandela University 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 robe maker to the university and as contracted suppliers of choice to students for graduation academic attire.

Photos In Seconds has been appointed as the official photographer of the university.



### Congratulatory message from the Alumni Association

#### Congratulations on your academic achievement! Welcome to the Nelson Mandela University family. You are now a Nelson Mandela University alumnus.

We would like to take this opportunity to introduce you to the Nelson Mandela University Alumni Association.

Once you have obtained your Nelson Mandela University certificate, diploma or degree you become an alumnus of the university and a member of the Nelson Mandela University Alumni Association. The Association is recognised by the university 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 Role of the Alumni Association Office

The Alumni Association Office is a public relations and projects department responsible for the day-to-day management and running of the Alumni Association, the University Shop and all matters related to alumni engagement. Primarily, we build relationships and maintain strong links with graduates, parents, friends and supporters of the university through events, networks, services, communications and community engagement.

#### The Role of Nelson Mandela University graduate

We encourage you to attend the alumni engagement events, be an active alumni ambassador, support your alma mater in a variety of ways including sharing news, expertise, skills, and contributions in cash and kind. We encourage a culture of giving back especially for student bursaries, which can be accessed on our alumni website.

#### **University Shop**

Visit the University Shop situated at the Sanlam Student Village on University Way, Summerstrand, for all Nelson Mandela University branded clothing, corporate gifts, bags and memorabilia!

#### Lifetime connection with Nelson Mandela University

We are proud of our alumni and value your connection.

We encourage you to stay in touch by updating your graduate profile. We will keep you informed with university developments and graduate news through our event invitations, project and campaign updates, regular e-newsletters via our website and social media channels.

Your graduate profile link https://mandela.devman.co.za/ Devman/alumni/findme/

We welcome your visit to the Alumni Associates Centre on North Campus in Port Elizabeth.

More info: T +27 41 504 3935 E alumni@mandela.ac.za Join us: O Nelson Mandela University Alumni www.alumni.mandela.ac.za O MandelaUni



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.

# **Change the World**

PO Box 77000, Nelson Mandela University Port Elizabeth, 6031

info@mandela.ac.za



mandela.ac.za