

UNIVERSITY



April 2022

Autumn Graduation

Ceremony 3

Faculty of Science

8 APRIL 2022 | 09:30

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



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Congratulatory Message from the Alumni Assocation		
National Anthem		

Congratulatory Message

Graduation is a significant milestone in life. It is the culmination of an academic journey that reflects your ambition, determination, commitment, perseverance and hard work. We know that this journey 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 financiall, 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 also focuses on all the potential and possibilities to come. It offers great hope for the future – and you are that bright future.

The coronavirus pandemic has transformed our lives - the way we work, study and live. Today, however, we are filled with joy and gratitude to be able to celebrate your graduation together in person. We are also extremely pleased that many more are able to join us virtually via livestreaming. As a student who had to navigate your studies in

Dr Geraldine Fraser-Moleketi Chancellor

unprecedented circumstances, we especially salute and applaud your achievement as you pioneered this path. It could not have been easy.

We wish you all the very best for your future endeavours wherever they may take you as a proud alumnus of Nelson Mandela University. Continue learning through-out your life journey. Allow the flame of your curiosity for the new and yet to be discovered to burn brightly. Education is your passport to the future – and also to the future hopes of our country and our continent. It is indeed a foundation for a better world. Or as Nelson Mandela so eloquently put it:

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

Congratulations!

Umyalezo wokuvuyisana

Uthweso zidanga ludumo olubaluleke kunene ebomini. Yinkcochoyi kuhambo lwemfundo enomsila echaza ukunxanwa kwakho, ukuzimisela, ukuzinikela, ukunyamezela kwanomsebenzi onzima. Siyayazi ukuba olu hambo asilolenu kuphela, nanjengoko uninzi luthe lwakhenketha nani – abahlobo benu, abahlohli beny, abaphathi benu, amakhankatha akho kwakunye nosapho lwenu. Babinze kuni ngokwezimali, banikhuthaza ukuba ninyamezele, banikhokela kwizifundo zenu, kwaye, kuyo yonke into, bakholelwa kumxakatho wenu wokuphumelela kwanokuzuza eli phupha lokuthweswa isidanga.

Namhlanje uchulumanco lwakho luchulumanco lwethu. Ilixa elibaluleke kunene – usuku lothweso sidanga – kufuneka lubhiyozelwe kuba aluqapheli nje kuphela konke othe wakuzuza kodwa likwagxila nakumandla kwanakumathuba azayo. Lisinika ithemba elikhulu kwikamva – kwaye ulelo kamva liqhakazileyo.

Intsholongwane yekhorona ibutshintshile ubomi bethu – indlela esisebenza, esifunda nesiphila ngayo. Kodwa namhlanje, sizele luvuyo nombulelo wokukwazi ukubhiyozela uthweso zidanga zenu Sisonke njengeziqu. Siyavuya kakhulu nanjengoko abanye abaninzi bekwazi ukuba yinxalenye yethu ngokobuxhakaxhaka bosasazo ngqo.

Njengomfundi oye waqhuba izifundo zakhe ngeendlela ebezingalindelekanga, sikothulela umnqwazi

ngokukhethekileyo futhi sikuqhwabela izandla kokuzuzileyo. Akukhange kubelula.

Sikunqwenelela okuhle kodwa, kwiinzame zakho zekamva elizayo, naphi na apho ziza kuthatha zikuse khona njengobesakuba ngumfundi ozingcayo weYunivesithi iNelson Mandela.

Qhubeka nokufunda kubude bohambo lobomi bakho. Vumela intlantsi yokunxanelwa ulwazi ukuba izalwe ngokokutsha kwaye iqanduselele ukutshikalela ekukhanyeni. Imfundo sisazisi sakho sobomi – kwakunye nakwithemba lekamva lelizwe lethu kwakunye nezwekazi lethu. Ngaphandle kwamathandabuzo, isisiseko sekamva elingcono. Okanye nanjengokuba uNelson Mandela eyibeka ngokucacileyo:

"Imfundo lelona krele lakhe lanamandla ongathi ulisebenzise ukutshintsha ihlabathi."

Huntshu!

Gradeplegtigheid is 'n belangrike mylpaal in jou lewe. Dit is die hoogtepunt van 'n akademiese reis wat jou ambisie, vasberadenheid, toewyding, deursettingsvermoë en harde werk weerspieël. Ons weet dat hierdie reis dikwels nie net joune alleen was nie, aangesien baie mense saam met jou gereis het – jou vriende, jou dosente, jou studieleiers, jou mentors en jou familie. Hulle het finansieel in jou belê, jou aangemoedig om te volhard, jou studies gelei en bowenal geglo in jou vermoë om sukses te behaal en hierdie gradeplegtigheidsdroom te bewaarheid.

Vandag is jou vreugde ook ons vreugde. So 'n belangrike oomblik – jou gradeplegtigheidsdag – moet gevier word, want dit erken nie net alles wat jy bereik het nie, maar fokus ook op al die potensiaal en moontlikhede wat voorlê. Dit bied groot hoop vir die toekoms – en jy is daardie blink toekoms. Die koronaviruspandemie het ons lewens verander – die manier waarop ons werk, studeer en leef. Vandag is ons egter gevul met vreugde en dankbaarheid om jou gradeplegtigheid persoonlik saam te kan vier. Ons is ook baie bly dat baie meer mense virtueel by ons kan aansluit via die regstreekse uitsending.

As 'n student wat jou studies in ongekende omstandighede moes navigeer, salueer en loof ons veral jou prestasie as baanbreker op hierdie pad. Dit kon nie maklik gewees het nie.

Ons wens jou alles van die beste toe vir jou toekomstige pogings waar hulle jou ook al mag neem as 'n trotse alumnus van Nelson Mandela Universiteit.

Gaan voort om deur jou lewensreis te leer. Laat die vlam van jou nuuskierigheid helder brand vir dit wat nuut is en nog ontdek moet word. Opvoedkunde is jou paspoort na die toekoms – en ook na die toekomshoop van ons land en ons vasteland. Dit is inderdaad 'n grondslag vir 'n beter wêreld. Of soos Nelson Mandela dit so welsprekend gestel het:

"Opvoedkunde en onderwys is die kragtigste wapen wat jy kan gebruik om die wêreld te verander."



Professor Sibongile Muthwa Vice-Chancellor

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 responsibility 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 healthy environment for all people, and
- are instilled with a deep need to serve and give back.

Fast Facts



NORTH, SOUTH, OCEAN SCIENCES, SECOND

AVENUE (IN SUMMERSTRAND) MISSIONVALE

(MISSIONVALE), BIRD STREET (CENTRAL),

GEORGE (GEORGE CAMPUS IN THE GARDEN

ROUTE)

31860 ENROLLED STUDENTS

INSTITUTIONAL RESEARCH THEMES

2230
PERMANENT EMPLOYEES

258
PROGRAMMES

(FROM CERTIFICATE THROUGH TO DOCTORAL QUALIFICATIONS)

FACULTIES

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



STRATEGIC FOCUS AREAS

INTERNATIONAL S T U D E N T S

51 DIFFERENT COUNTRIES

Office-Bearers of the University

CHANCELLOR

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

CHAIRPERSON OF COUNCIL

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

VICE-CHANCELLOR

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

DEPUTY VICE-CHANCELLOR: ENGAGEMENT AND TRANSFORMATION

Prof A Keet: BA, HDE, BEd, MEd (UWC), PhD (Edu Mang, Law and Policy) (UP)

DEPUTY VICE-CHANCELLOR: LEARNING AND TEACHING

Prof CD Foxcroft: BA, BAHons, MA, DPhil(UPE)

DEPUTY VICE-CHANCELLOR: PEOPLE AND OPERATIONS

Mr LE Hashatse: BJourn & Media, BAHons(Rhodes), MA(Edith Cowan University, Australia)

DEPUTY VICE-CHANCELLOR: RESEARCH, INNOVATION AND INTERNATIONALISATION

Dr T Mgwebi: BSc, BScHons, MSc, HDipEd(Unitra); PhD(UCT); PGDeg(Tertiary Education Management)(University of

Melbourne, Australia)

DEAN OF STUDENTS

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

EXECUTIVE DIRECTOR: FINANCE

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

REGISTRAR

Mr EB De Koker: BA(UCT), BAHons(UNISA), MA(Pub Admin) (University of Warwick, UK)

PRESIDENT OF ALUMNI ASSOCIATION

Mr K Blose: BSc(Construction Economics), BScHons(Quantity Surveying)(NMMU)

Executive Deans of Faculties

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 TECHNOLOGY

Prof D Pottas (Acting): BScHons(PU CHE), PhD(RAU), MCSSA

HEALTH SCIENCES

Prof Z Zingela: MBChB(Natal), FCPsych(SA), MMed(UP)

HUMANITIES

Prof P Maseko: BA, BAHons(UWC), MA, Cert in Assessor's Course (Curriculum Development and Assessment in HE), PhD,

PGDip in Higher Ed(RU)

LAW

Dr L Biggs (Acting): BCom (Law), LLB(UPE), LLM (Labour Law) (cum laude), LLD(NMMU)

SCIENCE

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

DEAN OF LEARNING AND TEACHING

Dr P Kota-Nyati: BA(Vista), BAHons, MA Couns Psych(UPE), DPhil(Mandela Uni)

Order of Proceedings

Entrance of Academic Procession

Moment of silence

Constitution of Congregation and Welcome

Prof SW Muthwa (Vice-Chancellor)

Choral performance

Nelson Mandela University George Campus Choir

Awarding of qualifications

Prof SW Muthwa (Vice-Chancellor)

Conferring of Doctoral Degrees

Prof SW Muthwa (Vice-Chancellor)

Message of Congratulations and Dissolution of Congregation

Prof SW Muthwa (Vice-Chancellor)

National anthem

Nelson Mandela University George Campus Choir

Departure of Academic Procession

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

FACULTY OF SCIENCE

HIGHER CERTIFICATE IN VELDFIRE MANAGEMENT

DINGISWAYO, Chuma DLADLA, Oupa Jacob GCELU, Kuhle

GQIRANA, Siphelele

GWAMANDA, Phumlile Brightness

MANDLAZI, Selby

MATHANGANA, Bayanda

MBEJISANE, Buhle

MNOYISHWA, Lelethu

NDLOVU, Khethelo Phakamani

NODUNYELWA, Ongeziwe

NZIMANDE, Siyanda

SHILAKWE, Fred

TOMANA, Luphumlo

TSHESANE, Kgotlelelo

TYENI, Abongile Hlomla

ZONDI, Nozipho

CUM LAUDE

GROENEWALD, Renier SWANEPOEL, Maritza

DIPLOMA IN AGRICULTURAL MANAGEMENT

BIDOLI, Matteo

DU PLESSIS, Luhan

GOOD, Jethro Nicholas

GUMEDE, Thabo Esaia

HALANA, Sinazo Catherine

JHO, Mmiselo

JIYANE, Sinethemba

KOZA, Lona

KULANI, Alude Fikiswa

LENTSA, Thuto

MADALANE, Fezile

MAJWEDE, Ntomboxolo

MAKHETHA, Ntombizodwa

MBATHU, Thobeka Charity

MPATANE, Aviwe

MTSHISA, Odwa

NCOMBOTWANA, Sisa

NDABA, Ndumiso Nobleman

NGCUNGAMA, Amanda

NGXAZA, Phumeza

ODELL, Stuart Oliver

POTELA, Sibulele Gracious

QOTYANA, Sdima Samkelisiwe

QWANE, Yamkela

SCHOEMAN, Rosie

SIJORA, Alizwa

SIMPSON, Bruce Warren

THUNU, Siziphiwe

TSHAKA, Sambeso

TSHETSHA, Siphe

TSHISHONGA, Zwivhuya

VENTER, Izak

VERMAAK, Arno Jean

CUM LAUDE

JORDAAN, Luwes Martinus Willem Jordaan JORDAAN, Timòn

DIPLOMA IN FORESTRY

BAFO. Thandile

BARRY, Thomas Henry

BELE, Thabiso

BHEBHI, Buseka

BIYELA, Thulani Amen

CANDLOVU, Oyena

DLADLA, Philile Hlengiwe

DLAMINI, Aphiwe

JAMA, Bongeka

KHANYILE, Gcinile Khululiwe

KOK, Christo Marthinus

LEGODI, Patricia Kgomotlokwa

MABANGA, Ismail Mlungisi

MADLULELA, Sinelizwi

MANGCOTO, Kaya

MDLALOSE, Mbongeni Williem

MDLULI, Siyabonga

MDUNJANA, Mawande

MTHELEKISO. Annita

MTSHINTSHI, Mzomhle

NDALENI, Lelonathemba

NDLELA, Alan

NDUKU, Siphesande Arlington

NEKHAVHAMBE, Khodani Collen

NGCWANGU, Qawekazi

NKOSI, Kwanele Bhekumuzi

NKOSI, Nondumiso Angel

NKOSI, Nqoba Israel

NOTSHWELEKA, Ferny Sandisiwe

NTSHINGILA, Mcolisi Alex

NYEMBE, Sboniso Reginald

NZIMANKULU, Mbulelo

PAILE, Morwaoshele Emmanuel

PHAKATHI, Siyabonga Prince

PHUZA, Thandolwethu Zukile Zukisani

SABA, Entle

SACOLO, Nelizwe Mbali

SHIBITI, Buhlebenkosi Confidence

SHONGWE, Nicholas Sanele

SIPIKA, Onesimo

TSHILO, Seithati

VAN STADEN, Nigel Owen Migeul

VOGES, Petrus Christiaan

XOBISO, Zakhe Mateo

XULU, Sanele Oscar ZIDE, Vuyolwethu ZWANE, Siyanda ZWANE, Zamokuhle

DIPLOMA IN WOOD TECHNOLOGY

MAPHODISANE, Petrus Mpuwa MBIXANE, Zizipho Kolosa MUTENGA, Bernard Munyaradzi NDEVU, Likho NDYALIVANE, Vuyo Thabo NGUBO, Thuliswa SAMBO, Miyelani Justin SELEPE, Sylvester Teboho

ADVANCED DIPLOMA IN AGRICULTURAL MANAGEMENT

BORNMAN, Devon Raymond ESSAMA MBEZELE, Bernard Yves FANA, Khanya MBANANGA, Sikhumbuzo

ADVANCED DIPLOMA IN FORESTRY

COOK, Mitchell KHOSA, Nhlamula Confindence LUBISI, Nito MADLANGA, Sinoxolo
MALEK, Christel Cherelene
MCUNUKELWA, Lutho
SHEZI, Mhlengi Braveman
SIBANYONI, Sibusiso Knowledge
SIBIYA, Doris
SITHOLE, Sabelo
SOBANTU, Siyanda
TSHEKULA, Mziwandile
TWALA, Beauty Nosipho
ZITHA, Henny Mbukuteni

ADVANCED DIPLOMA IN WOOD TECHNOLOGY

VERSTER, Jean-Pierre

BACHELOR OF TECHNOLOGY: FORESTRY

MADIBA, Dumisani Philip MANANA, Sibusiso Emmanuel NGCECE, Amanda Sinethemba Sikhethokuhle

BACHELOR OF TECHNOLOGY: WOOD TECHNOLOGY

HOBE. Sinazo

MASTER OF SCIENCE (RESEARCH)

CHETTY, Keesha (Nature Conservation)
Title of dissertation:

CHACMA BABOON CROP RAIDING PATTERNS AND FARMER PERCEPTIONS OF DETERRENT METHODS IN WABOOMSKRAAL AND HEROLD AGRICULTURAL AREAS IN THE WESTERN CAPE, SOUTH AFRICA

Supervisor: Dr B Wren Co-supervisor: Dr ABL Currie-Killick

DLOKWENI, Phozisa - *Cum Laude*

(Forestry)

Title of dissertation:

AN ASSESSMENT OF PRODUCTIVITY AND VOLUME RECOVERY OF MECHANISED HARVESTING IN A PINE FIRE SALVAGING OPERATION IN THE EASTERN CAPE, SOUTH AFRICA

Supervisor: Dr MM Ramantswana Co-supervisor: Dr AM McEwan

GIDDEY, Brandon Louis - *Cum Laude* (*Nature Conservation*)

Title of dissertation:

EFFECT OF FIRE SEVERITY ON AFROTEMPERATE FOREST TREE SURVIVAL

Supervisor: Dr T Kraaij Co-supervisor: Mr J Baard

MILES, Bayleigh Jordan - Cum Laude

(Nature Conservation)

Title of dissertation:

POTENTIAL SUPPRESSIVE EFFECTS OF ALIEN ACACIA MELANOXYLON ON AFROTEMPERATE FOREST TREE RECRUITMENT

Supervisor: Dr T Kraaij

ZIMBODZA, Jacob

(Forestry)

Title of dissertation:

THE EFFECTS OF SLASH MANAGEMENT METHODS AND PIT PREPARATION TECHNIQUES ON PIT QUALITY, GROWTH RESPONSE, OPERATIONAL PRODUCTIVITY, AND ITS COST EFFECTIVENESS AT RE-ESTABLISHMENT

Supervisor: Dr MM Ramantswana Co-supervisor: Prof KM Little **DOCTOR OF PHILOSOPHY** BROOKE, Francis Rae (Nature Conservation) Title of thesis: CAPE VULTURES (GYPS COPROTHERES) AND THE THREAT OF WIND FARMS: A RACE TO EXTINCTION? Supervisor: Prof JA Venter Co-supervisor: Dr MB Pfeiffer Co-supervisor: Prof CT Downs MC CULLOCH-JONES, Emily Joy (Nature Conservation) Title of thesis: THE TRADE IN HORTICULTURAL FERNS: CHARACTERISATION, INVASION SUCCESS, AND DISTRIBUTION Supervisor: Dr T Kraaij Co-supervisor: Prof N Crouch MC CULLOCH-JONES, Samantha Jo (Nature Conservation) Title of thesis: PROMOTING ADAPTIVE GOVERNANCE IN LANDSCAPE-SCALE CONSERVATION: LEARNING FROM THEORY AND **PRACTICE** Supervisor: Prof DJ Roux Co-supervisor: Dr ABL Currie-Killick Co-supervisor: Dr AP Novellie ROBERTS, Jonathan Cecil (Nature Conservation) Title of thesis: THE DEVELOPMENT OF AN INTEGRATED HERBICIDE FINANCIAL RISK MODEL FOR PLANTATION FORESTS IN SOUTH AFRICA Supervisor: Prof KM Little Co-supervisor: Dr CA Rolando SCHWEGMAN, Kylle (Nature Conservation)

Title of thesis:

THE USE OF PSYCHOMETRIC TEST SYSTEMS AS A PRE-SELECTION TOOL FOR IDENTIFYING SUCCESSFUL HARVESTING MACHINE OPERATORS

Supervisor: Dr R Spinelli Co-supervisor: Dr N Magagnotti Co-supervisor: Dr AM McEwan Co-supervisor: Dr MM Ramantswana

DOCTORAL CITATIONS

FACULTY OF SCIENCE

THE DEGREE OF DOCTOR OF PHILOSOPHY (NATURE CONSERVATION)

FRANCIS RAE BROOKE

Previous qualifications:

2015 National Diploma (Nature Conservation)
 2016 Baccalaureus Technologiae: Nature Conservation
 2018 Master of Science: Nature Conservation (Cum laude)

Nelson Mandela Metropolitan University Nelson Mandela Metropolitan University Nelson Mandela University



Thesis:

CAPE VULTURES (GYPS COPROTHERES) AND THE THREAT OF WIND FARMS: A RACE TO EXTINCTION?

Wind energy infrastructure in South Africa is increasing and presents a threat to the southern African endemic Cape Vulture. This endangered species faces many human induced threats and may experience further decline due to wind energy development. The study explored the susceptibility of Cape Vultures to wind energy development and the population response to this emerging threat. It found that Cape Vultures use areas close to established and proposed wind farms. The study also showed that should higher mortality rates occur because of increased wind energy developments, the species will experience a drastic decline. This could have far reaching ecological implications.

Supervisor: Prof JA Venter Co-supervisor(s): Dr MB Pfeiffer

Prof CT Downs

THE DEGREE OF DOCTOR OF PHILOSOPHY (NATURE CONSERVATION)

EMILY JOY MCCULLOCH-JONES

Previous qualifications:

2016 National Diploma (Nature Conservation)
 2017 BTech (Nature Conservation) (*Cum laude*)
 2019 Master of Science (Nature Conservation) (*Cum laude*)

Tshwane University of Technology Nelson Mandela Metropolitan University Nelson Mandela University



Thesis:

THE TRADE IN HORTICULTURAL FERNS: CHARACTERISATION, INVASION SUCCESS, AND DISTRIBUTION

How horticultural trade drives invasion success in ferns poses an important question. Despite their apparent invasive potential and long history in horticulture, ferns remain understudied and underrepresented as invaders. The novelty of this research was three-fold; market traits that drive invasion success in ferns was assessed, novel species introductions were identified through trade, and the potential global distributions of eight highly traded invasive ferns predicted. This study improved understanding of the drivers of invasion success, provided country specific suggestions for targeted management responses, and developed the essential information required for the management of alien ferns.

Supervisor: Dr T Kraaij Co-supervisor: Prof N Crouch

THE DEGREE OF DOCTOR OF PHILOSOPHY (NATURE CONSERVATION)

SAMANTHA JO MCCULLOCH-JONES

Previous qualifications:

2010 National Diploma (Nature Conservation) Cape Peninsula University of Technology 2013 Bachelor of Technology (Nature Conservation) Nelson Mandela Metropolitan University 2016 Master of Technology (Nature Conservation) Nelson Mandela Metropolitan University



Thesis:

PROMOTING ADAPTIVE GOVERNANCE IN LANDSCAPE-SCALE CONSERVATION: LEARNING FROM THEORY AND PRACTICE

Globally, there is a trend towards collaborative environmental governance for conserving biodiversity at landscape scales but the inherent complexity in landscapes pose many challenges. Adaptive governance has been proposed as a solution as it aims to establishing learning feedback in decision-making at multiple interconnected levels. There is a call for more research into mechanisms and approaches that can advance the operationalisation of adaptive governance for landscape-scale conservation. This study describes interventions to catalyse learning. It explores mechanisms to evaluate and enhance adaptive practices at multiple levels of governance in a donor-funded landscape-scale conservation initiative in South Africa.

> Supervisor: Prof DJ Roux Co-supervisor(s): Dr ABL Currie-Killick

Dr AP Novellie

THE DEGREE OF DOCTOR OF PHILOSOPHY (NATURE CONSERVATION)

JONATHAN CECIL ROBERTS

Previous qualifications:

2013National Diploma (Forestry)Nelson Mandela Metropolitan University2014BTech (Forestry) (Cum laude)Nelson Mandela Metropolitan University2016MSc (Forestry) (Cum laude)Nelson Mandela Metropolitan University



Thesis:

THE DEVELOPMENT OF AN INTEGRATED HERBICIDE FINANCIAL RISK MODEL FOR PLANTATION FORESTS IN SOUTH AFRICA

The aim of this dissertation was to develop an herbicide use risk model for vegetation management within commercial pulpwood plantations of South Africa (SA). The model assesses the economic risk associated with vegetation management through quantifying the total amount of herbicides applied throughout the growth of a stand, while considering the financial return and rotation-end growth responses obtained. Overall, this study provides benchmark data and derives information as to the necessity for various vegetation management options within the commercial forestry sector of SA. The herbicide risk model use will not only assist foresters with choosing the most appropriate site-specific vegetation management methods to use, it will also provide them with an indication of the magnitude of volume and profit loss, should a less intensive approach be followed.

Supervisor: Prof KM Little Co-supervisor: Dr CA Rolando

THE DEGREE OF DOCTOR OF PHILOSOPHY (NATURE CONSERVATION)

KYLLE SCHWEGMAN

Previous qualifications:

2014 National Diploma: Forestry

2015 BTech: Forestry2017 MSc: Forestry

Nelson Mandela Metropolitan University Nelson Mandela Metropolitan University Nelson Mandela University



Thesis:

THE USE OF PSYCHOMETRIC TEST SYSTEMS AS A PRE-SELECTION TOOL FOR IDENTIFYING SUCCESSFUL HARVESTING MACHINE OPERATORS

This doctoral study investigated the potential use of psychometric test systems as a preselection tool for identifying successful wood harvesting machine operators, by developing a better understanding of what causes large variation within harvester machine operators' productivity, besides the well-known effect of tree volume. The study aimed at determining whether a psychometric test package known as the Vienna Test System could pre-determine suitable candidates for training potential harvester operators. The research findings suggest that the Vienna Test System can be used to identify productive harvester machine operators, with future research potentially focusing on adding personality types to the pre-selection process.

Supervisor: Dr R Spinelli Co-supervisor(s): Dr N Magagnotti Dr AM McEwan Dr MM Ramantswana

Honorary Doctoral Recipients

Mr S Mfenyana - Doctor of Philosophy (honoris causa) Ms Noxolo Grootboom - Doctor of Philosophy (honoris causa) Prof L Pepeta - Doctor of Health Sciences (honoris causa)(posthumous)

Nelson Mandela University will confer honorary doctoral degrees on three distinguished individuals during its Autumn graduation ceremonies this year.

Celebrated media personality, **Noxolo Grootboom**, receives a Doctor of Philosophy (honoris causa) for her invaluable work and contribution to journalism, media and communication, as well as her upliftment of the linguistic heritage of South Africa.

A Doctor of Philosophy (honoris causa) will also be awarded to struggle stalwart and ANC veteran, **Sindiso Mfenyana**, for his life-long struggle for South Africa's liberation, his vocality on anti-corruption and patronage and his fi m belief in constitutional democracy.

Acclaimed paediatric cardiologist and former Dean of the Faculty of Health Science, the late **Professor Lungile Pepeta**, will be posthumously awarded a Doctor of Health Sciences (honoris causa) for his contributions as a paediatric cardiologist, medical researcher, academic and activist, and for being a pioneer of the medical industry in South Africa, particularly in child health care.

The degrees will be awarded during ceremony 4, 12 and 18 at the Gqeberha ceremonies.







Ms Noxolo Grootboom



Professor Lungile Pepeta

Academic Dress

Special academic attire has been 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

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 sleevespleated 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

Humanities:

Business & Economic Sciences:

Health Sciences:

Law:

Education:

Science:

Engineering, the Built Environment and Technology:

Business School:

Yellow

Plum

Apple green

Grey blue

Orange

Dark green

Light blue

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 photograph r 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 alumna/ us 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.

Mandela Alumni Connect – the online alumni networking platform

Join the Mandela Alumni Connect community - to stay in touch with fellow alumni, get informed about events, career guidance, mentorship initiatives and expand your network. Register on https://alumni.connect.mandela.ac.za/ Visit our website and follow or connect to our social media channels for more information regarding our alumni digital networking platform.

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



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!

Alternatively, Shop online for all your favourite branded items **https://onlineshop.mandela.ac.za/** Collection and delivery options available online.



Stay connected to your alma mater! #MandelaAlumni4Life









https://onlineshop.mandela.ac.za/

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

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