



**DURBAN UNIVERSITY OF TECHNOLOGY**  
**INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE**

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**27 MAY 2021 | 12:00**





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Chancellor

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Chancellor

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Ms N Nyembezi

Chancellor



## MESSAGE FROM THE CHANCELLOR

**Ms Nonkululeko Nyembezi**

Dear Graduating students, class of 2020

Congratulations to our newest alumni, the graduating class of 2020. You have accomplished an enormous amount and you have even greater potential than when you began your studies here at Durban University of Technology. You have earned your qualification and you have accomplished so much.

For some, you will be earning your undergraduate degrees, for others, this will mark the culmination of your postgraduate and professional degrees. For all of us though, I am fully aware that our actions to prevent the further spread of COVID-19 may have caused a disruption to this special occasion. I am as heartbroken as you are that your graduation from the Durban University of Technology has been impacted by this global pandemic.

It is my utmost wish that you remain connected with your lecturers, your friends and your classmates. Remain steadfast, as I am in the knowledge that your DUT education and the relationships you made, the learning you achieved and the experiences you had during your time at DUT will serve you well in the years to come.

You are DUT for Life.

Ms Nonkululeko Nyembezi

Chancellor



Sibingelela abazokwethweswa iziqu zonyaka ka-2020

Siyanibingelela

Igama lami nginguNonkululeko Nyembezi, nginguShansela weNyuvezi yaseThekwini yezobuChwepheshe. Ngamandla enginikwe wona njengoShansela, ngithi usungaqala umcimbi wokwethweswa kweziqu weNyuvezi yaseThekwini yezobuChwepheshe ozobe ubonakala kumabonakude.

Halala kubafundi bethu abozokwethweswa iziqu, labo abaqede izifundo zabo ngonyaka ka-2020. Nizuze okukhulu kakhulu futhi seniqeqesheke kakhulu okudlula ngesikhathi niqala izifundo zenu lapha eNyuvesi yaseThekwini yezobuChwepheshe. Nizisebenzele iziqu zenu futhi nizuze okukhulu.

Abanye, iziqu zabo zokuqala lezi, abanye bazogogoda. Lokhu kuzokhombisa umphumela weziqu eziphezulu neziphathelene nomsebenzi enizowenza. Kithi sonke nokho, ngiyazi ukuthi ukwenza kwethu ukuvikela ukubhebhetheka kokhuvethe kungenzeka ukuthi kudale ukuphazamiseka kulomcimbi osemqoka kangaka. Nakumina kubuhlungu lokhu njengakunina ukuthi umcimbi wenu wokwethweswa iziqu waseNyuvesi yaseThekwini yezobuChwepheshe uphazamisekile ilolu bhubhane olusemhlabeni wonke.

Kuyisifiso sami ukuthi bungapheli ubudlelwano phakathi kwenu nothisha benu, abangani benu kanye nozakwenu. Ningaguquki, njengoba ngazi ukuthi imfundo yase-DUT kanye nobudlelwano enibenzile, enikufundile kanye nezinto enihlangabezane nazo ngesikhathi nisesa-DUT konke lokhu konisebenzela eminyakeni eyazo.

Niyohlezi ningabase-DUT.





## MESSAGE FROM THE VICE-CHANCELLOR AND PRINCIPAL

Professor Thandwa Zizwe Mthembu

As we are all aware, Durban University of Technology (DUT) has produced thousands of graduates over the years. However, the 2021 cohort is the first since the start of implementation of *ENVISION2030* and the emergence of Covid-19 and all its ramifications on our teaching-learning arrangements we had to pivot from.

With the launch of **ENVISION2030** early last year, you would have had a taste of it including the idea of DUT's DNA and the DUT-Way that emanates from it. In future, when we reflect on the impact of the new strategy in all its facets, you will be the baseline cohort.

On behalf of DUT people, I take this opportunity to congratulate you on your important personal accomplishment. We recognize that this milestone carries with it important meanings, part of which suggests you have maintained the discipline of your thoughts and behaviour characteristic of DUT people. Without the requirement of discipline, this day may not have been possible for many of you. For this reason, I dare say that the very discipline you have demonstrated thus far will carry you through your next personal growth trajectories, ranging from further studies, starting a career, starting your own business to even starting a family.

To borrow from Jim Collins, a combination of a culture of discipline and an ethic of entrepreneurship produces "*the magical alchemy of great performance*". We, thus, have no doubt that focused and disciplined as you were during your studies, and with DUT entrepreneurial flair we have been instilling over a number of years now, you will be greatly successful in your pursuits.

More especially over the last few years of study at DUT, you would have appreciated the strategic approach, outcomes and impacts of our teaching-learning and research-innovation philosophy. We have sought to position DUT as a university of and for its broader society. We exist because our people must use their individual and collective creativity, innovation and entrepreneurial flair to solve perennial and new problems our broader society faces. Solutions to these must contribute towards improving the lives and livelihoods in our society. Through our '*Innovative Research and Curricula*', we expect you to become a model DUT '*Adaptive Graduate*' who will unleash your creativity and imagination to become the source of change and advancement. By 2030 we will be a vanguard of that change and advancement in society. We see you as an equal partner in this historic voyage we have just embarked upon.

Your graduation coincides with a myriad of challenges confronting the world, the African continent and South Africa as a nation. We do not expect you to feel sorry for yourselves or mourn the persistence of these problems. As DUT, we have accepted Pascal Finette's assertion that people are a source of everything that happens across all institutions of society. This means that it is people who are behind the problems we know. Similarly, we know that it is a different type of people who contribute ideas that will lead to lasting solutions. In the recent past, I said the following when unpacking the Stewardship Perspective of *ENVISION2030*:

*It is about being true and selfless stewards of everyone and everything we are custodians of. It is about our deep conviction and purity of character in our collective quest to reach our ultimate goal. It is about something deeper, irreducible, somewhat intangible, that will sustain us on a flight to greatness. Allow me to say Stewardship is essentially our compass towards our ultimate and shared destiny of greatness.*

As a DUT graduate, you should enthusiastically contribute towards the lives and livelihoods of all our people. In everything you do and will do onwards, may you demonstrate DUT's DNA and the DUT-Way. May you live all DUT's Values and Principles as part of your way of life. That way, you will stand out and be seen to be a distinctive DUT graduate that all will wish to associate with, perhaps employ and perhaps partner with on big and innovative projects.

We wish you all the best in your future endeavours. Become the change you have always yearned for.

# UMLAYEZO KASEKELA SHANSELA NOPHINDE ABE NGUTHISHANHLOKO



Njengoba sonke sazi, iNyuvesi yaseThekwini yezobuChwepheshe (DUT) isikhiqize izinkulungwane zezitshudeni eminyakeni eyedlule. Noma kunjalo, labo abathweswa iziqu ngo-2021 bangabokuqala selokhu kusungulwe uhlelo olubizwa nge-ENVISION2030 kanye nokuvela kokhuvethe nezinguquko-ke obekufanele zenziwe ekufundiseni nokufunda.

Ngesikhathi kuqala i-ENVISION2030 ekuqaleni konyaka odlule, ngaleso sikhathi ubungabe usutholile ukuthi iyini yona okubandakanya nomqondo wolibofuzo lwe-DUT neNdlela ye-DUT esuka kuyo. Ngesikhathi esizayo uma sesibuka okwenziwe yileli su elisha kuzo zonke izinhlangathi zalo, niyoba yiqembu lokuqala okweqhathaniswa nalo.

Uma ngikhulumela abantu base-DUT, ngithatha lelithuba ukunihalalisela empumelelweni yenu emqoka kangaka. Siyaqonda ukuthi lempumelelo isho lukhulu kini, okunye kwakho kusho ukuthi nikwazile ukuqoqa imicabango yenu kanye nendlela yokuziphatha okuyinto efana nabantu base-DUT. Ngaphandle kokukwazi ukuziphatha ngendlela, lolusuku bekungenzeka lungabi yimpumelelo kwabaningi benu. Ngalokho ngithi, lindlela enikwaze ukuziphatha ngayo kuze kubemanje izoniqhuba kwenizokwenza kusukela manje, kungaba ukuqhubeka nezifundo, ukusebenza, ukuqala amabhizinisi enu noma ukuqala imindeni.

Ukuthatha emazwini ka-Jim Collins, isiko lokukwazi ukuziphatha kanye nendlela yokukwazi ukuphatha amabhizinisi lokhu kokubili kukhiqiza, “*the magical alchemy of great of performance*” okusho ukuthi “umlingo wenqubo yoguquko yokukhulu kokwenza umsebenzi”. Ngakho, asingabazi ukuthi indlela enikwaze ngayo ukugxila kwenikwenzayo nokuziphatha njengoba benenza ngesikhathi sezifundo zenu kanye nobuhle bokusungula amabhizinisi ebekufakwa ezingqondweni zenu e-DUT enqwabeni yeminyaka eyedlule, ngaleyo ndlela niyophumelela kukho konke enihlela ukukwenza.

Ikakhulukazi eminyakeni yokugcina yokufunda e-DUT, kufanele ngabe nithakasele izindlela zokwenza izinto, imiphumela yendlela izinto ezenzeka ngayo, kanye nemiphumela yendlela yokufunda-nokufundisa kanye nezindlela ezintsha zocwaningo zobunjalo bolwazi nezinto eziyiqiniso nezikhona. Sizame ukuthola indlela yokubeka i-DUT njengenyuvesi yomphakathi wonkana. Sikhona ukuze abantu bakwazi ukusebenzisa amakhono abo ngabanye nanoma futhi besebenzisana nabanye, ukukwazi ukufika namacebo okwenza izinto ngcono kanye nokukwazi ukwenza kahle kwezamabhizinisi bakwazi ukuxazulula izinkinga ezintsha kanye nalezo umphakathi wonkana osubhekene nazo inqwaba yeminyaka. Lezi zisombululo kufanele kube ukuthi zibe negalelo ekwenzeni ngcono izimpilo zabantu kanye nendlela yabo yokuphila emphakathini yethu. Nge, “Innovative Research and Curricular” silindele ukuthi nibe yisibonelo se-DUT, “izitshudeni esezigodile ezikwazi ukumelana noshintsho” ezizokwazi ukucabanga ngokusabalalisa umqondo kanye nekhono lokudala ukuze nibe umsuka woshintsho nokuthuthuka. Ngonyaka ka-2030 kuyobe kuyithi esihamba phambii ngezindlela ezintsha zokuthuthukisa umphakathi. Sinibona njengabalingani bethu kulomlando wohambo esilulaqalayo.

Ukuthweswa kwenu iziqu kwenzeke ngesikhathi izwe libhekene nenqwaba yezingqinamba, izwekazi lase-Afrika kanye neNingizimu Afrika njengesizwe. Asilindele ukunibona nidabukisa okanye nikhungathwe ukuba khona kwalezi zinkinga ezingapheli. Njenge DUT, sesiwamukele umbono ka-Pascal Finnet othi abantu bawumsuka wayo yonke into eyenzakalayo kuzo zonke izikhungo zomphakathi. Lokhu kusho ukuthi ngabantu abayimbangela yezinkinga esizaziyo. Kuyefana nokuthi, siyazi ukuthi ngabantu abathile abayobamba iqhaza ngemibono eyoholela ezisombululweni ezohlala zikhona njalo. Esikhathini esingasingakanani esedlule, ngasho lokhu okulandelayo uma ngichaza ngoMbono wokuPhatha we-ENVISION2030:

*Kumayelana nokuba ngumholi weqiniso nongayena ugombela kwesakhe kubantu nakho konke lokhu okudinga ukunakekelwa yithi. Kumayelana nokujula nokukholelwa kwethu kanye nobumsulwa bobuthina ekubambisaneni ekufuneni lokho okuwumgomo wokugcina, ongehliseki, ongasho nje ukuthi into engabambeki, lokho kuyosilondoloza size sifinyelele kokukhulu. Ngivumeleni ngisho ukuthi uBuholi buyinkombandlela bendawo yethu esiphokophelele kuyo neyokugcina yethu sonke yobukhulu.*

Njengomfundi wase-DUT othweswe iziqu, kufanele niphonse esivivaneni ezimpilweni zabantu bethu kanye nendlela abaziphilisa ngayo. Kukho konke enikwenzayo nenizokwenza ukuya phambili, sengathi ningakhombisa uLibofuzo lwe-DUT neNdlela ye-DUT. Sengathi ningaphila ngazo zonke izinto ezibalulekile neziyigugu nezimiso ze-DUT njengengxenywe yempilo yenu. Ngaleyo ndlela, niyogqama niphinde nibonakale ukuthi ningabafundi abathweswe iziqu e-DUT abantu bonke abayofisa ukwazana nabo, mhlampe babaqashe okanye babe ngabalingani babo emisebenzini emikhulu yokuqhamuka nezinto ezintsha.

Sinifisela okuhle kodwa kulokhu enizokwenza kusasa. Yibani ushinto enanikade nifisa ukuba yilo.



## MESSAGE FROM THE PRESIDENT OF CONVOCATION

Mr Siyabonga Vezi

Class of 2020. Congratulations on your well-deserved success!

You should be extremely proud of your accomplishment. One's graduation is always a momentous occasion, but completing your studies and graduating during the midst of a world-wide pandemic is nothing short of extraordinary. You have made it through a very challenging time. Your indomitable spirit and a thirst for success has propelled you to work hard and see this through. Well done! These are the very skills that will hold you in good stead and give you the confidence to overcome hurdles and continue with the journey ahead.

ENVISION2030 speaks of producing adaptive graduates – developing graduates with the acumen to initiate and/or respond to change. The Class of 2020 epitomises that. You were faced with uncertain times but your resilience and fortitude endured and here you are, today, celebrating all the hard work that led to this victory. As you celebrate let us pay homage to those that have made sacrifices to ensure you fulfil your potential as a contributing member of society. Pay it forward as you, too, seek to *Improve Lives and Livelihoods*. To make a donation to DUT go to [www.dutalumni.com](http://www.dutalumni.com) and click on “Ways to Give”. Select one of the three payment options. It is that easy.

Having being ranked among the top five Universities in South Africa, according to the Times Higher Education World Rankings, as DUT we are confident that we have produced graduates with a social conscience who will make an indelible mark on the world and who will certainly become members of a global community.

We hope that you have created fond memories of your time at DUT and we look forward to welcoming you back should you choose to continue with postgraduate studies. The Executive Committee of Convocation is proud to be part of one of your greatest achievements. We look forward to great things from the graduating Class of 2020. I humbly request that you make contact by continuously updating your details so that you maintain your lifelong link with DUT, your *Alma Mater*.

# UMLAYEZO KAMENGAMELI WENHLANGANO YABAFUNDI ASEBETHWESWE IZISU



Ukwethweswa kwezisu kwasebusika 2021

Bafundi bango-2020. Halala empumelelweni yenu enifanele!

Kufanele niziqhenye ngesenikuzuzile. Umcimbi wokwethweswa izisu ungumcimbi uhlale ungomqoka kakhulu, kodwa-ke ukuqeda izifundo zenu niphinde nithweswe izisu ngesikhathi izwe libhekene nobhubhane emhlabeni wonke lokho kuyisimanga esikhulu. Niphumelele kunzima. Umoya wokuphikelela kanye nokomela impumelelo kunenze nasebenza kanzima kwaze kwaba manje. Nisebenzile! Lawa ngamakhono ayonigcina aphinde aninike ukuzethemba okuyonenza nikwazi ukumelana nezingqinamba niphinde niqhubeke nohambo enibhekene nalo.

Uhlelo i-ENVISION2030 lukhuluma ngokukhiqiza izitshudeni ezikwazi ukumelana nezimo ezahlukene-ukuthuthukisa izitshudeni ngobuchule ukuze zikwazi ukuqala kanye/noma zikwazi ukuthi zenzenjani uma kufika ushintsho. Abafundi baka-2020 bayisibonelo esihle ngokweqile salokho. Benibhekene nesikhathi esinzima kodwa nibekezele ngenxa yamandla nesibindi, namhlanje nizobungaza ukusebenza ngokuzikhandla okuholele kulempumelelo. Nisabungaza, ningakhohlwa ilabo abadele konke ukuqinisekisa ukuthi ningalabantu eniyibona namhlanje abaneqhaza abalibambayo njengamalungu omphakathi. Khokha ngendlela yokuthi nawe uyafuna ukuthi *Izimpilo zabantu zibe ngcono kanye neNdlela abantu abaphila ngayo*. Uma ufuna ukuphonsa esivivaneni e-DUT ungangena ekhasini le-internet: [www.dutalumni.com](http://www.dutalumni.com) bese ucofa lakuthi, “iziNdlela zokuNikela.

Ukubekwa kanye namanyuvesi amahlanu aphezulu ohlwini eNingizimu Afrika, ngokwe-Times Higher Education Worlds Rankings, njenge-DUT siyazethemba ukuthi sikhiqize izitshudeni ezikwaziyo ukuphila nabantu eziyoyibeka induku ebandla, futhi ezizoba amalungu omphakathi omhlaba jikele.

Sithemba ukuthi nizenzele izinkumbulo ezithandekayo zesikhathi senu e-DUT kanti singakuthokozela ukubuya kwenu uma nikhetha ukuqhubeka nezifundo zenu. Ikomidi Elikhethekile leNhlango yasebethweswe izisu liyaziqhenya ngokuba yingxenye yenye yempumelelo yenu enkulu kangaka. Sibheke okuhle kodwa ezitshudenini zango-2020 ebezithweswa izisu. Nginyaninxusa ukuthi nixhumane nathi ngokuthi niqhubeke nokubuyekeza imininingwane yenu ukuze nigcine ubudlelwano benu ne-DUT njalo, inyuvesi yenu ebenifunda kuyo.

Khumbulani ukuhlala ngokuqhelelana, ukugeza izandla imizuzwana engama-20 bese-ke njalo nifaka isimfoyo uma niphumela phandle.

Niphephe. Nibusiseke.

## COUNCIL MEMBERS

Mr N Z W Madinane

Chairperson of Council

Ms D Hlatshwayo

Vice-Chairperson of Council

### EXTERNAL COUNCIL MEMBERS

Mr MF Gumede

Convocation

Mr M Shange

Convocation

Mr DP Makaya

Convocation

Mr S Vezi

Council Appointee

Mr Z Gumede

Council Appointee

Ms B Chiliza

Council Appointee

Prof L Molamu

Council Appointee

Ms B Ntombela

Council Appointee

Mr S Sibiya

Council Appointee

Mr B Singh

Council Appointee

Ms GG Twala

Council Appointee

Cllr. W Mapena

eThekweni Municipality

Dr N Makhanya

Minister of Higher Education

Ms D Hlatshwayo

Minister of Higher Education

Mr T Hlongwa

Minister of Higher Education

Ms B Masinga

Minister of Higher Education

Mr L Longwe

Minister of Higher Education

Mr LKT Mehta

ML Sultan Charitable and Education Trust

### INTERNAL COUNCIL MEMBERS

Prof TZ Mthembu

Vice-Chancellor and Principal

Prof MN Sibiya

Deputy Vice-Chancellor: Teaching and Learning

Vacant

Deputy Vice-Chancellor: People and Operations

Mr P Moodley

Academic Staff

Mr M Estrice

Institutional Forum

Mr L Khumalo

Professional and Administrative Staff

Mr Z Ntuli

Student Representative Council

Mr N Ntshaba

Student Representative Council

Prof V Rawjee

Senate

Prof FG Netswera

Senate

Mr S Rampursad

Support and Service Staff



# OFFICE BEARERS

Ms N Nyembezi

Chancellor

## EXECUTIVE AND SENIOR MANAGEMENT

Professor TZ Mthembu

Vice-Chancellor and Principal

PhD (Wits); MSc (Vanderbilt); BSc Hons (UFH)

Professor MN Sibiya

Deputy Vice-Chancellor:  
Teaching and Learning

D Tech (DUT); M Tech (TN); BCur Hons (UniZulu)

Vacant

Deputy Vice-Chancellor:  
People and Operations

Professor S Moyo

Deputy Vice-Chancellor:  
Research, Innovation and Engagement

PhD (UND); M TEM (UniMelb); MSc (UND)

Dr TS Pillay

Registrar

D Tech (DUT); MPA (UDW)

Professor O Olugbara

Executive Dean:  
Accounting and Informatics

PhD (UniZulu); MSc (Unilorin)

Professor S Singh

Executive Dean:  
Applied Sciences

PhD (UDW)

Professor B Pearce (Interim)

Executive Dean:  
Arts and Design

PhD (UniLondon); MA (UN)

Professor B Twala

Executive Dean:  
Engineering and the Built Environment

PhD (OU); MSc (Southampton); BA (UNESWA)

Professor AHA Ross (Interim)

Executive Dean:  
Health Sciences

D Tech (DUT); M Tech (TN); PG Dip (SU); B Mus (UCT)

Professor FG Netswera

Executive Dean:  
Management Sciences

DPhil (SU); PGDip (Buckinghamshire Chilterns);  
NDP (TSA); BA Hons (UWC); BA (UniVEN)

Mrs NF Dhumazi

Chief Financial Officer

M Com (UP); PGDip (UniSA); B Com (UniVEN) CA (SA)

Dr QPT Mtshali

Chief Information Officer

PhD (NSU); BSc (SUNY)

Mr S Nyangintsimbi

Chief Risk Officer

MPhil (UP); MBL (UniSA); B Com (WSU)

Dr JM Moleté

Director: Midlands Campuses

PhD (PSU); MBA (UCT); MSc (HU); BSc Hons (Wits)

Dr D Mohale

Director: Special Projects

DLitt et Phil (UniSA); MM (Wits); BA (CUT)

Dr VL Mthethwa

Senior Director:  
Human Resources

PhD (UKZN)

## HEADS OF DEPARTMENTS

### FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

Architecture (Interim)	Mr L S du Plessis	MArch (UKZN); SAIA; Pr Arch
Chemical Engineering (Interim)	Professor SLK Kiambi	PhD (LAPLACEU); B Hons (MU)
Civil Engineering and Geomatics (Interim)	Mr G M Hoosen	MTech (MLST)
Civil Engineering, Pietermaritzburg (Interim)	Dr J Ikotun	PhD (WU); MSc (UDundee); BEng (FUTMINNA)
Construction Management and Quantity Surveying	Dr A O Aiyetan	MTech (CM); Pr CPM; Pr CM
Electrical Power Engineering	Prof I E Davidson	PhD (UCT); MEng (Unilorin); BEng Hons (UKZN); Pr Eng; SEMAC (BCIT, Canada); FIET; FSAIEE; SMIEEE; MNSE; MCIGRE; MBCSEA; MWCGCE
Electronic and Computer Engineering	Dr S Reddy	PhD (UCT); M Eng (UP); BSc Eng (UND); SMSAIEE, MIEEE
Industrial Engineering	Dr O A Olanrewaju	DTech (TUT); MSc (Unilbadan)
Mechanical Engineering	Dr F M Mwangi	DTech (DUT); MTech (DUT) Pr Eng; CPA (K); MSAIMechE
Town and Regional Planning	Dr G M Lincoln	PhD (DUT); MTRP (UND)



# Faculty of Engineering and the Built Environment

## Degree of Doctor of ENGINEERING

ARMAH Edward Kwaku  
(Full Research)

### Title of Thesis

Anaerobic co-digestion of agricultural biomass with industrial wastewater for Biogas production

### Summary

With the increasing demand for clean and affordable energy which is environmentally friendly, the use of renewable energy sources is a way for future energy generation. South Africa, like most countries in the world are over-dependent on the use of fossil fuels, prompting most current researchers to seek an affordable and reliable source of energy which is also, a focal point of the United Nations Sustainable Development Goal 7. In past decades, the process of anaerobic digestion (AD) also referred to as monodigestion, has proven to be efficient with positive environmental benefits for biogas production for the purpose of generating electricity, combined heat and power. However, due to regional shortages, process instability and lower biogas yield, the concept of anaerobic co-digestion (AcoD) emerged to account for these drawbacks. Given the considerable impact that industrial wastewater (WW) could provide nutrients in anaerobic bio digesters, the results of this study could apprise decision-makers and the government to further implement biogas installations as an alternative energy source. The study aims at optimizing the biogas production through AcoD of the agricultural biomasses: sugarcane bagasse (SCB) and corn silage (CS) with industrial WW sourced from Durban, KwaZulu-Natal, South Africa. The study commenced with the characterisation of the biomasses under this study with proximate and ultimate analysis using the Fourier transform infrared spectroscopy (FTIR), the thermo gravimetric analysis (TGA), the scanning electron microscopy (SEM) and the differential scanning calorimetry (DSC). The untreated biomass was subjected to biochemical methane potential (BMP) tests to optimize and predict the biogas potential for the selected biomass. A preliminary run was carried out with the agricultural biomass to determine which of the WW streams would yield the most biogas. Among the four WW streams sourced at this stage, two WW streams; sugar WW (SWW) and dairy WW (DWW) produced the highest volume of biogas in the increasing order; SWW > DWW > brewery WW > municipal WW. Therefore, both SWW and DWW were selected for further process optimization with each biomass. Using the response surface methodology (RSM), the factors considered were temperature (25-55 °C) and organic loading rate (0.5-1.5 gVS/100mL); and the response was the biogas yield (m<sup>3</sup>/kgVS). Maximum biogas yield and methane (CH<sub>4</sub>) content were found to be 5.0 m<sup>3</sup>/kgVS and 79%, respectively, for the AcoD of CS with SWW. This established the association that existed among the set temperatures of the digestion process and the corresponding organic loading rate (OLR) of the AcoD process operating in batch mode. Both CS and SCB have been classified as lignocellulosic and thus, ionic liquid (IL) pretreatment was adapted in this study to ascertain their potential on the biogas yield. Results showed that the maximum biogas yield and CH<sub>4</sub> content were found to be 3.9 m<sup>3</sup>/kgVS and 87%, respectively, after IL pretreatment using 1-ethyl-3-methylimidazolium acetate ([Emim][OAc]) for CS with DWW at 55°C and 1.0 gVS/100mL. The IL pretreatment yielded lower biogas but of higher purity of CH<sub>4</sub> than the untreated biomass. Data obtained from the BMP tests for the untreated and pretreated biomasses were tested with the existing kinetic models; first order, dual pooled first order, Chen and Hashimoto and the modified Gompertz. The results showed that for both untreated and pretreated biomass, the modified Gompertz had the best fit amongst the four models tested with coefficient of correlation, R<sup>2</sup> values of 0.997 and 0.979, respectively. Comparatively, the modified Gompertz model could be the preferred model for the study of industrial WW when used as co-substrate during AcoD for biogas production. The study showed that higher biogas production and CH<sub>4</sub> contents were observed when CS was employed as a reliable feedstock with maximum volume of the untreated and pretreated feedstock reported at 31 L and 20 L respectively.

**Supervisor** Dr M Chetty  
**Co-supervisor** Prof N Deenadayalu



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BURAIMOH      Elutunji  
(Full Research)

**Title of Thesis**

Modelling and fault ride-through control of grid supporting inverter-based microgrid

**Summary**

Microgrids are a critical part of Smart Grid infrastructure due to the rapid increase in grid integration of intermittent RE sources using power electronics, to meet customer demand for electricity, rural electrification and mitigate load shedding. Microgrids are required under emerging national grid codes to provide ancillary services such as fault ride-through (FRT), voltage/frequency support, protection and stability. The candidate developed discrete-time models of a grid supporting, grid-feeding and grid-forming system with primary and secondary controls using interacting droops for DER parallel operation and power-sharing, and proposed an effective FRT secondary control strategy within a hierarchical control structure to coordinate power injection during balanced and unbalanced fault conditions. A novel technique is used in the secondary control to realize FRT, dynamic voltage support and active power curtailment using a delay signal cancellation (DSC) algorithm for sequence detection, and implemented to detect fault instances in 1.6% of its first half-cycle.

**Supervisor**

Prof IE Davidson

GUMEDE  
(Full Research)

Makhosonke

**Title of Thesis**

The extraction of power and fresh water from the ocean off the coast KZN utilizing Ocean thermal energy conversion techniques

**Summary**

There is a rapidly developing problem in South Africa concerning its ability to supply sufficient power and water to cover the country's ever increasing needs. This is being exacerbated by rapid expansion of local manufacturing industries, and by the broader program to supply domestic electricity to the entire population. The research proposes a novel design of a Thermal Energy Plant (OTEC), for supplying fresh water and power in the South Coast region of KwaZulu-Natal. The selected area to place the plant in Port Edward. Port Edward lies just beneath the tropic of cancer and on the shore of the Indian Ocean thus two important elements needed for OTEC namely constant sunlight and large coastal areas can easily be found in this region. More importantly, the steep drop in water depth down to 3000 meters makes this an ideal research site for ocean thermal energy conversion in KwaZulu-Natal.

**Supervisor**

Prof P Naidoo

KOSGEY  
(Full Research)

Eric Kiprotich

**Title of Thesis**

Comparative study of anammox-mediated nitrogen removal in three reactor configurations

**Summary**

Anaerobic ammonium oxidation (ANAMMOX) is an efficient and cost-effective process developed for biological nitrogen removal from wastewater. However, its application remains constrained due to the slow growth of ANAMMOX bacteria and its sensitivity to environmental and operational conditions. The study focused on the impact of mixing conditions on nitrogen removal and bacterial population dynamics in ANAMMOX-mediated hybrid up-flow anaerobic sludge blanket reactor (H-UASB), moving bed biofilm reactor (MBBR) and a gas-lift reactor (GLR) over 535-day period. MBBR displayed the highest nitrogen removal efficiency, followed by H-UASB, and then the GLR. In addition, MBBR contained the highest relative abundance of nitrifying bacteria and the least abundance of the ANAMMOX bacteria, while H-UASB contained the highest relative abundance of ANAMMOX bacteria and the least abundance of the nitrifying bacteria. These results indicate that better-mixed conditions in the MBBR favoured nitrifying bacterial growth, while plug-flow conditions in the H-UASB favoured ANAMMOX bacterial growth, in agreement with the modelling results based on modified activated sludge model number 1.

**Supervisor**

Prof SKK Pillai

**Co-Supervisors**

Prof F Bux

Prof SL Kiambi

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MUKUBWA Emmanuel Wanyama  
(Full Research)

**Title of Thesis**

Random numerical linear precoding and channel estimation in massive MIMO systems

**Summary**

The channel precoder was formulated and adapted using the iterative linear Rapid Numerical Algorithm (RNA). This model was then extended to include coordination among multicell massive Multiple-Input Multiple-Output (MIMO) systems with receive combining computational complexity and efficiency evaluation. The RNA model was further used to formulate improved linear and semi-blind channel estimators for massive MIMO systems in combination with the Fast Data Projection Method (FDPM). The semi-blind channel estimator was combined with a compressed data channel estimator then extended based on Givens transformations and the Data Projection Method (DPM) for a massive MIMO, a partially centralised MIMO and a Cloud Radio Access Network (C-RAN). Then, the estimation of the signal-to-interference-to-noise ratio, bit error rates, spectral efficiency, energy efficiency and normalised mean square error for the respective modelled components was realized. The models above were simulated using MATLAB for the analysis and validation. The TDD downlink massive MIMO system was considered with varying immediate channel state information qualities for the single-cell and multicell systems. For single-cell systems, there was optimal performance with regard to the signal-to-interference-to-noise ratio and the bit error rate when RNA was used to implement the matrix inversion process in comparison to existing methods. It also rendered the precoding process highly parallelizable further reducing the complexity. For the multicell massive MIMO, it was found that the performance of rapid numerical algorithm implementation gave good spectral and energy efficiency performance in comparison to existing methods while lowering the complexity further through parallelization. The compressed data channel estimator gave a comparable performance for the spectral efficiency and normalized mean square error when compared to the improved linear channel estimators. The semi-blind channel estimators for both massive and partially centralised MIMO and C-RAN outperformed the linear channel estimators as well as the compressed data channel estimator.

These results demonstrate that a rapid numerical algorithm can effectively eliminate the intricate matrix inversion associated with linear precoding while rendering itself to efficient parallelization. It also shows that the compressed data channel estimator optimally estimates the channel covariance matrix while reducing the amount of channel state information transmitted in the estimation process. The semi-blind channel estimators have the optimal performance with regard to the normalised mean square error. It was also illustrated that the Givens transformation based semi-blind estimator outperforms the FDPM based semi-blind channel estimator.

**Supervisor** Dr O A Sokoya

MUSAMALI Ronald Wafula  
(Full Research)

**Title of Thesis**

Non-oxidative conversion of methane into carbon and petrochemicals over Fe, W&Mo Catalyst systems supported on activated carbon and HZSM-5

**Summary**

Various catalyst systems were synthesized and evaluated in the non-oxidative conversion of methane. Metal synergy, effect of process conditions and the type of catalyst preparation methods were investigated. Increasing iron (Fe) and Tungsten (W) content in Fe-W-Mo/ZSM-5 system resulted in a significant increase in methane conversion and a decrease in C<sub>2</sub> and aromatic hydrocarbons. While M<sub>2</sub>C on HZSM-5 proved to be the most active site for the activation of the C-H bond in methane molecules, it showed no significant activities on the decomposition of CH<sub>3</sub> radicals. Activated carbon support showed better methane conversion compared to HZSM-5 support, the latter resulted in a wider product distribution. Both the HZSM-5 properties and its reaction with Mo<sup>6+</sup> were contributory to the production of C<sub>2</sub> intermediates. For the first time, the development of a catalyst system for quantitative control of non-oxidative methane conversion and product distribution using Fe, W, and Mo catalyst systems loaded on AC/HZSM-5 has been reported. Findings from the work have confirmed sustainable technologies for environmentally friendly methane conversion are realistic. This could be key to friendly transformation of the hydrocarbon reserves in the Karoo region of South Africa.

**Supervisor** Prof YM Isa

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MUSTAPHA      Sheriff Ishola  
(Full Research)

**Title of Thesis**

Thermal conversion of algal biomass and its derivatives to fuels and petrochemicals

**Summary**

Producing biofuel as a function of microalgae growth conditions was investigated. In addition to altering algal composition, growth conditions affected the pyrolytic bio-oil yields at different temperatures. Among the series of catalysts developed and investigated, Co/Fe<sub>3</sub>O<sub>4</sub>-HZSM-5 showed better activity in enhancing the bio-oil quality and yield. Bio-oil with high heating value of 40.78 MJ/kg was successfully produced. These findings resulted in a predictive tool for determining pyrolytic bio-oil yields. It was also found that Zr/HZSM-5 significantly improved product quality during algal hydrothermal liquefaction. While it was observed that reaction pressure had minimal impact on hydrothermal gasification (HTG) of *Scenedesmus obliquus* microalgae, biomass composition and concentration played a critical role in the product distribution. Controlling appropriate reaction conditions resulted in more than 53 mole% of methane and a hydrogen yield of yield of 75.44 mmol/g in separate experiments. While exploring Lean production it was found that the ranking order for the yield and lower heating value of the product gas from the HTG process was lipid > whole algae > LEA. The findings of this work are a stride towards national and global bioeconomies.

**Supervisor**      Prof YM Isa

**Co-Supervisor**      Prof F Bux

**Degree of Doctor of Philosophy in the  
Built Environment**

HARIPERSAD      Rajesh  
(Full Research)

**Title of Thesis**

An assessment of the impact of selected construction materials on the life cycle energy and thermal comfort in building

**Summary**

South Africa is a developing country with various construction projects being undertaken by both government and the private sector. The requirements for the construction of energy-efficient buildings as well as the selection methods for providing construction materials have hence become important. Energy efficiency improvements needs to be implemented in the construction of these buildings in order to decrease energy usage and costs and provide more comfortable conditions for its occupants. Previous studies revealed that most of the focus for improving energy efficiency in buildings has been on their operational emissions. It is estimated that about 30% of all energy consumed throughout the lifetime of a building is utilized as embodied energy (this percentage varies based on factors such as age of building, climate and materials). In the past this percentage was much lower, but with increased emphasis placed on reducing operational emissions (such as energy efficiency improvements in heating and cooling systems), the embodied energy contribution has become more significant. Hence, it is important to employ a life-cycle carbon framework in analysing the carbon emissions in buildings.

The study aims to augment energy efficiency initiatives by showcasing energy reduction strategies for buildings. The study assessed the thermal performance of selected construction materials by analysing different buildings using energy modelling program, EnergyPlus and TRNSYS. The parametric study was set in the central plateau region of South Africa and was performed to determine appropriate energy efficiency improvements that can be implemented for maximum savings. A life cycle cost analysis was performed on the selected improvements. The models created are representative of the actual buildings when simulated data is compared to recorded data from these buildings. Results showed a significant variation in energy and construction costs with varying construction materials over the buildings' life cycle. Findings suggest that there is a significant reduction in energy usage when simple efficiency measures are implemented. The study recommends the use of different energy efficient building materials and the implementation of passive interventions in the constructing of buildings; the thermal performance of a building be optimized to ensure thermal comfort and the developed model be adopted for use in the engineering and construction industry for the reduction of energy consumption.

**Supervisor**      Prof IJ Lazarus

**Co-Supervisors**      Dr AO Aiyetan  
                                 Dr R Singh

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**Degree of Master of the  
BUILT ENVIRONMENT**

KITCHING Joseph  
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**Title of Dissertation**

Geographic information systems (GIS) as a vessel for the conventional and alternative forms of Zoning

**Supervisor** Dr G Musvoto  
MLOTSHWA Ntobeko Fakazi  
(Full Research)

**Title of Dissertation**

Exploring participatory planning practices for informal street traders in small towns. The case of Ladysmith CBD informal street traders

**Supervisor** Dr K Erwin  
**Co-Supervisor** Dr G Musvoto

SHAIK AHROON ALLY Nadia  
(Full Research)

**Title of Dissertation**

Integrating planning and environmental legislation within Municipal Planning in South Africa: a case study in Durban, eThekweni Metropolitan Municipality.

**Supervisor** Dr G Musvoto

**Degree of Master of  
ENGINEERING**

AKPASI Stephen Okiemute  
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**Title of Dissertation**

Evaluation of kaolinite and activated carbon performance for CO<sub>2</sub> capture

**Supervisor** Prof YM Isa

ANEKWE Ifeanyi Michael  
(Full Research)

**Title of Dissertation**

Bioremediation of acid mine drainage and crude oil contaminated soils

**Supervisor** Prof YM Isa

ASANTE-SACKEY Dennis *CUM LAUDE*  
(Full Research)

**Title of Dissertation**

Optimization of donnan dialysis for alum recovery from potable water treatment residue

**Supervisor** Prof S Rathilal  
**Co-Supervisor** Prof VL Pillay

BUTHELEZI Nokulunga Priscilla  
(Full Research)

**Title of Dissertation**

The effect of heavy metal composition on the performance of sugarcane bagasse as an adsorbent in water treatment

**Supervisor** Prof YM Isa

CHETTY Dhanpal  
(Full Research)

**Title of Dissertation**

Application of optimal control for power systems considering renewable energy technologies

**Supervisor** Dr G Sharma  
**Co Supervisor** Prof IE Davidson

---

ESTRICE Milton Solomon  
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**Title of Dissertation**

Design of control strategies for frequency regulation of PV-Thermal interconnected power system

**Supervisor** Dr G Sharma  
**Co-Supervisor** Mr KT Akindeji

HAIKELA Endifenge Teeleleni  
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**Title of Dissertation**

Conversion of biomass-derived oils over promoted ZSM-5 based catalysts

**Supervisor** Prof YM Isa

HARRIPERSADTH Charlene *CUM LAUDE*  
(Full Research)

**Title of Dissertation**

Evaluating the performance of an Eggshell-Bagasse Biosorption system in removing Lead and Cadmium from Aqueous Solutions

**Supervisor** Prof P Musonge  
**Co-Supervisor** Prof YM Isa

JAJBHAY Hoosen Ahmed  
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**Title of Dissertation**

Influence of coarse aggregate on the shear strength of reinforced concrete beams

**Supervisor** Prof D Allopi

JOSHI Milankumar Bharatbhai  
(Full Research)

**Title of Dissertation**

Load frequency control of a hydro dominating interconnected power system

**Supervisor** Dr G Sharma  
**Co-Supervisor** Prof IE Davidson

JWARA Thandeka Yvonne Sthembile *CUM LAUDE*  
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**Title of Dissertation**

Chemical Oxygen demand (COD) fractionation for process modelling considerations and optimization

**Supervisor** Prof P Musonge  
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KANYINDA Kabuya  
(Full Research)

**Title of Dissertation**

Application of DMAIC to improve energy use in commercial building

**Supervisor** Prof IJ Lazarus  
**Co-Supervisor** Dr OA Olanrewaju

LEHOLO Sempe Thom  
(Full Research)

**Title of Dissertation**

Modelling and optimization of hybrid micro-grid system for LTE base station

**Supervisor** Prof PA Owolawi  
**Co-Supervisor** Mr KT Akindeji

MACHIVHA            Rofhiwa Tevin  
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**Title of Dissertation**  
Analysing South Africa's automotive energy consumption: Application of index decomposition analysis

**Supervisor**            Dr OA Olanrewaju

\*MADIKIZELA            Mbaliyezwe Precious            *CUM LAUDE*  
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**Title of Dissertation**  
Effect of operating conditions on the hydrothermal valorization of sewage sludge

**Supervisor**            Prof YM Isa

MALANDA            Sindisiwe Cindy  
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**Title of Dissertation**  
Transient fault analysis of a VSC-Based-Unit Multi-Terminal HVDC scheme

**Supervisor**            Prof IE Davidson  
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**Title of Dissertation**  
Voltage stability in distribution network

**Supervisor**            Dr G Sharma  
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**Title of Dissertation**  
An application of lean techniques to accelerate the implementation of kaizen in film packing industry

**Supervisor**            Dr OA Olanrewaju  
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MTUKUSHE            Namhla Faith  
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**Title of Dissertation**  
The analytical study on the establishment of a Tidal Power Plant in South Africa

**Supervisor**            Dr EE Ojo

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**Title of Dissertation**  
A technical and financial analysis of smart prepaid split meter on Eskom Electric Distribution network

**Supervisor**            Prof IE Davidson

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**Title of Dissertation**  
The investigation of the effect of atmospheric conditions on the temperature drop across heat treatment systems

**Supervisor**            Prof PY Tabakov  
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PILLAY Justin  
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**Title of Dissertation**  
Stress and stability analysis of steel piping systems in the petroleum industry

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**Title of Dissertation**  
The application of lean principles to mitigate greenhouse gas emissions in an Automotive Industry

**Supervisor** Dr OA Olanrewaju

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**Title of Dissertation**  
Network optimization with high penetration of roof-top solar-PV

**Supervisor** Prof IE Davidson

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**Title of Dissertation**  
The development of road safety assessment screening procedures for the City of Tshwane Metropolitan Municipality

**Supervisor** Prof D Allopi  
SEWNARAIN Shikhar  
(Full Research)

**Title of Dissertation**  
Harnessing tidal energy for electrical power generation in South Africa

**Supervisor** Dr C Onunka  
**Co-Supervisor** Mr KT Akindeji

**BACHELOR OF ENGINEERING TECHNOLOGY Honours in  
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MAHLABA	Manqoba Fortune	
MATHEBULA	Akani Angel	
MBATHA	Nsikelelo Yoliswa	
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MOMOZA	Ongezwa	
MOODLEY	Nikita Kaylene	
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NAIDOO	Craig Alistair	
NAIDOO	Katlyn Nicolene	
NATHANIEL	Japheth Samuel	
NGWENYA	Nontando Yenziwe	
NXUMALO	Veronica Merinda	
PILLAY	Travina	
PILLAY	Trishani	
RAMAVATHER	Kavir	
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MANQELE	Thulile Vuyolwethu	
MATHENJWA	Nkosinomusa Nduduzo	
MBONGWE	Bongumusa Prosper	
MNYOSI	Mhleli Welcome	
MOODLEY	Yeshodhan	
MPULO	Nosipho	
MSOMI	Lindani	
MSWELI	Sphamandla Scelo	
MTHEMBU	Ntuthuko Siyanda Blessing	
MTHEMBU	Phumlani Reginald	
MTSITSA	Tobile	
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NDUNAKAZI	Nontobeko Felicia	
NDWANDWE	Siyathokoza Loyiso	
NKOSI	Zethembiso Luciano	
NTULI	Qiniso Vusi	
NZIMANDE	Sinethemba Freedom	
NZUKE	Nkosinathi	
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PILLAY	Shalin	
RAJA	Mekash	
RAMDIN	Shayur	
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JOBANPUTRA	Meet Umesh
KORKIE	Randal Stanton
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KHANYE	Sandile Goodman
KHARIVHE	Khathutshelo Doctor
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REDDY	Letalia	
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MAQABANE	Sesam	
MOKOENA	Londiwe	
MWANA NGOY	Mujinga	
MZIZI	Nkosingiphile Bright Mthembeni	
NDHLOVU	Denzel Tofara Tamsaqa	
RADEBE	Sibongiseni	
REDDY	Kailan	
REDDY	Nicole Adrian	
SIKHAKHANE	Mlungiseni Freedom	
SKHOSANA	Siphumelele Lungelo	

### Degree of Bachelor of Technology in ARCHITECTURAL TECHNOLOGY

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DESAI	Muhammad Yusuf	
DUDHRAJ	Aveeth	
DUMAKUDE	Xola Clement	
EBRAHIM	Muhammed Siddeeq	
GAMEDE	Luthando	
GOVENDER	Tristan	
GUMEDE	Themba Nothando Thobile	
HLATSHWAYO	Nomfundo Buhle	
HOOSAN	Muhammad	
JILI	Msizi Oswald	
JUGMOHAN	Nedine	CUM LAUDE
KAMALNARAIN	Alisha	
*KISTASAMY	Kayleigh	CUM LAUDE
LEMBETHE	Mlungisi	
LOCKHAT	Ismail Ebrahim	CUM LAUDE
MAHARAJ	Alshen	
MAHARAJ	Kanchan	
MALEKA	Motlotleng Kwaile	
MAVUNDLA	Njabulo Nhlanhla	
MNYANDU	Bongeka	
MOTHILALL	Vishal	
MPOFANA	Mziwamadoda Victor	
MSWELI	Senzo Sebastian	

NDLOVU	Silindile Favourite	
NDLOVU	Siphiwo Sihle	
NGCOBO	Ronald Samuel Siphелеle	
NYAWO	Phumuzile Lungile	
RAHEEM	Isa	CUM LAUDE
SAYED	Mohamed Shoib	
SENNO	Bongani	
SETUMONYANE	Nthathi Nthabiseng	
SIMELANE	Nduduzo Minenhle	
SINGH	Adhikaar	
SOKHELA	Lethukuthula Nkazimulo	
THUSI	Siphiwokuhle Nontobeko	
VAN ZYL	Liam-Tate	
WATKINS	Dane Christopher	
ZWIEGELAAR	Schalk Joubert	

### Degree of Bachelor of Technology in CONSTRUCTION MANAGEMENT

BIYELA	Nombulelo Cynthia	
BIYELA	Nothando Victorious Smangele	
CEBEKHULU	Percevearence Nomcebo	
CELE	Menzi Clive	
CHILIZA	Nomthandazo	
DE WAAL	Luc	
DLAMINI	Khanyisile Nondumiso	
DLAMINI	Ngcebo	
DLUDLA	Nqubeko Fanelesibonge	
GANYILE	Phindile	
GCITO	Joyce Ayanda	
GINA	Thabani Samson	
GWALA	Luyanda Thubelihle	
GXARA	Zodwa	
HLELA	Lindokuhle Mzuvele	
HLENGWA	Mlungisi Godfrey	
MADLALA	Sindisiwe Sarah	
MADLALA	Sisekelo Ntandoyenkosi	
MAHOMED	Zakariya Imraan	
MAJANGAZA	Malibongwe	
MAKALA	Mawande	
MALINGA	Lungelo Priviledge	
MASUKU	Thandeka Sithembile	
MBANJWA	Phumlani	
MBENSE	Asande Minenhle Siyabonga	
MDUDI	Bongekile Vuziwe	
MDUNYELWA	Ayanda	
MDUTYANA	Ziyanda	
MFONO	Khanya Sibonise	
MHLONGO	Mfanafuthi Sakhile	
MNGQIBISA	Nomfezeko	
MQADI	Zinhle Happiness	
MTHIYANE	Hubelani Bongumenzi	
MTSHULANA	Siphumzile Lancelote	
NDAMASE	Mzikantu Zanelizwi	
NDLOVU	Nelisiwe Sylvia	
NDUKU	Neliswa	
NGEMA	Winile Sibusisiwe	
NGUBANE	Ayanda	
NGWENYA	Bonisiwe Lungile	
NHLABATHI	Sduduzo Luthando Sinakhokonke	
NQOKO	Thulile	
NTANDA	Silindile Samukelisiwe	

\* Dean's Merit Award for Academic Excellence

NXUMALO	Thenjiwe
NYUBUSE	Sandile
NZAMA	Zamanzama
SHANDU	Mlungisi Professor
SHEZI	Emmaculate Sinqobile
SHEZI	Nobuhle Annatoria
SHONGWE	Armstrong Jabulani
SITHOLE	Ndalwenhle
SITHOLE	Zesuliwizinyembezi Bongeka
SMITH	Sanele Good-Enough
TETYANA	Nombedesho Nasiphi Spesihle
TSHAYINGWE	Yongama
TSOANANYANA	Moleboheng Benedictor
TYIDA	Siviwe
XABA	Mlungisi Emmanuel
ZUNGU	Lungelo

### Degree of Bachelor of Technology in ENGINEERING: CHEMICAL

ACKLOO	Shiara	
BASDEW	Nikita	
BHENGU	Bheka	
CHIGOMBO	Nomcebo Prudence	
DANISA	Melusi	
DLAMINI	Mzwandile Raymond	
FRANCIS	Ryan	
GAMA	Bhekithemba Innocent	
GIDA	Msawenkosi Wiseman	
GOPICHUND	Shanice	CUM LAUDE
GOVENDER	Preston	CUM LAUDE
*GOVENDER	Veroshini	CUM LAUDE
HLALATU	Patience Precious Nokuthula	
ISHWARLALL	Sashaleen	
JILI	Siphelele Prince	
KHAN	Ummeh Rumaan	
KHUMALO	Sanele	
KOSTER	Candace Roxane	
KUBHEKA	Prettygirl Nontobeko	
MABASO	Siyabonga	
MADONSELA	Samkelisiwe	
MAHMOOD	Zeean	
MANTSHONGANE	Lwanele	
MBELU	Nonkazimulo	
MBENGWA	Mboneni Charity	
MBUYISA	Nomusa Alice	
MFEKA	Ntandoyenkosi Pearl Thobile	
MHLANGU	Stembile Nkosingphile	
MHLONGO	Nosihle Hycynthia	
MLAMBO	Bongani Cedrick	
MNYANDU	Matapelo Mbali	
MOODLEY	Melisha	
MOODLEY	Selisha	
MOONSAMY	Jyothi	
MPONDO	Ntlahla	
MTHIYANE	Thobile	
MUNSAMY	Aveshni	
MYEZA	Ndumiso Siphamandla	
NAIDOO	Darona	
NAIDOO	Seshlin Lee	
NAIDOO	Taleah Tiara	CUM LAUDE
NDLOVU	Ayanda Nomfundo	

NGCOBO	Rejoice Nontsikelelo
NGOMANE	Londiwe Zikhona
NGUBANE	Sanelisiwe Benedictor
NGWAZI	Nomasonto Prudence
NYANDENI	Thabani
PADAYACHEE	Kavendran
PILLAY	Ashlyn
PILLAY	Craig Anthony
PILLAY	Logan Jason
PILLAY	Tamara Mcquell
RAJOO	Daryl Mason
RAMRACKAN	Daksha
RAMRAJ	Tarina
RAMUKHITHI	Thuso Mashudu
ROBERTSON	Melandri Chant'E
SHANGE	Nduduzo Blessing
SHEIK	Zia-Ul-Mustapha
SIJADU	Nombeko Graceful
SIKHAKHANE	Nhlakanipho Brian
SIMJEE	Aaliyah
WALTERS	Elichia Mellisa
ZONDI	Nomathamsanqa
ZUMA	Siyabonga Kenneth
ZUNGU	Ayanda Charity
ZUNGU	Sabelo Goodwill

### Degree of Bachelor of Technology in ENGINEERING: CIVIL Specialising in Construction Management

ABDULAZIZ	Clarissa	CUM LAUDE
*BADAL	Shravan	CUM LAUDE
BAIJNATH	Reosha	
BLAYI	Siyabulela	
CHINSAMY	Sheldon Bradey	
DEVNARAIN	Kamillia Candice	CUM LAUDE
DLAMINI	Lindokuhle Evidance	
DLAMINI	Sanele Rudolph	
DLAMINI	Silindile Fortunate	
GUMEDE	Fikile Babongile	
HLONGWA	Mphilisi Russell	
KHOZA	Minenhle Cyril	
KOMANISI	Yamkela	
LALLA	Candice	
MADLALA	Khethukuthula Prince	
MAJOLA	Nomthandazo Thobekile Andiswa	
MATANDA	Asavela Nosipo	
MKHIZE	Langelihle	
MKHOVANA	Ntandoyenkosi	
MKHWANAZI	Siyabonga Brian	
MKHWANAZI	Siyabonga Kwazikwakhe	
MUNGUAMBE	Skhumbuzo Remember	
MUNSAMI	Christele	CUM LAUDE
NDLOVU	Sibongumusa Gabriel	
NDZIMANDE	Kholisile	
NENE	Sakhile Langelihle Mlamuli	
NGCAMPHALALA	Mxolisi Stanley	
NTOMBELA	Nokulunga Lungi	
NTSHANGASE	Basil Mhlengi	
NTSHANGASE	Zothile Annatoria	
NYAMUSHO	Nompumelelo Nonhlakanipho	
PILLAY	Jetaine Preston	

\* Dean's Merit Award for Academic Excellence

POTGIETER	Quintin Lance	CUM LAUDE
SCATES	Neville Anthony	
SEEBARAN	Lischka	
SHUBRATI	Naeem	
SHUDE	Alton Simphiwe	
SITHOLE	Lindelwa Patience	
SODIDI	Hlabangane	
TAYI	Mbasakazi	
TWEDDELL	Luke Matthew	
VEZI	Phumelela Njabulo	
ZUNGU	Kusasalihle Ntuthuko Sunshine	

**Degree of Bachelor of Technology in  
ENGINEERING: CIVIL Specialising in Structural Engineering**

BUDHRAM	Ushveer	CUM LAUDE
CHELLAN	Kesivan	
HARIPERSAD	Nilesh	CUM LAUDE
MBATHA	Mpendulo Mpande	
MKHIZE	Thabiso	
MOGALIA	Muhammad	
MPUNGOSE	Silindokuhle Ntandoyenkosi	
MTOLO	Londeka Angel	
SCATES	Julian David	
*STAINBANK	Tristin Noel	CUM LAUDE
TAYLOR	Richelle Carmen Beth	
VAN STADEN	Bradley Martin	

**Degree of Bachelor of Technology in ENGINEERING:  
CIVIL Specialising in Transportation Engineering**

*ALLY	Anees	CUM LAUDE
MAKHANYA	Deon Mpilo	
MBATHA	Siyabonga Andile	
MDLALOSE	Vuyisile Patience	
MKHIZE	Sicelokuhle Mncedisi	
MVELASE	Andile Sphelelo	
MWELI	Thobani Wiseman	
NGWIRA	Nontethelelo Perseverance Noxolo	
NTOMBELA	Happiness Hlengiwe	
NYAWO	Silindile Lindokuhle	
SIBIYA	Sthabile Nomathamsanqa	
YENI	Nonduduzo Precious	
ZULU	Khulekani Sikhumbuzo	
ZUMA	Sandile	

**Degree of Bachelor of Technology in  
ENGINEERING: CIVIL Specialising in Urban Engineering**

BASSA	Mohammad	
FADA	Unathi Ntombodumo	
GEORGE	Chief	
GORDON-MCKENZIE	Brian Graham	
KISTEN	Tiroshan	
LOGNATH	Nicolas	
MADLALA	Thamsanqa Marvelous	
*MAGANLAL	Ashish Kumar	CUM LAUDE
MAJOLA	Sibonelo Luyanda	
MAJOLA	Vumelani Sandiselo	
MASEKO	Zanele Rebeca Pretty	
MAYAMBELA	Zwilenkosi	
MBEJE	Phumlani Sfiso	
MDLULI	Sanelisiwe Merciful	
MENDOZA	Dunhill	

MKHATHINI	Pearl Thabile	
MNUKWA	Asanda Judith	
NAIR	Elisa Sharon	CUM LAUDE
NGUBENKOMO	Asive	
PERUMAL	Keron	
RAMOROB	Dimakatso Naledi	
SEWCHARAN	Mithasha	CUM LAUDE
SEWSUNKER	Verushka	CUM LAUDE
SHABALALA	Peancone	
SIBIYA	Terrence Mthobisi	
THUSI	Thulile Annatoria	
TSHANGA	Gregoire	CUM LAUDE
VALLE	Remone	
XULU	Thanduxolo Xolani	
ZONDI	Sphumelele Ishmael	

**Degree of Bachelor of Technology in  
ENGINEERING: CIVIL Specialising in Water Engineering**

ABDOOLA	Adam Abraham	
*BALRAJ	Raksha Melissa	CUM LAUDE
BUTHELEZI	Khayelihle Nhlakanipho	CUM LAUDE
CELE	Nombuso Purity	
DU HECQUET DE RAUVILLE	Michel Louis	
KHUBONE	Thabane Enocent	
MAKHANYA	Andile Thandelakhe	
MASONDO	Sinenhlanhla Siphelele	
MBELE	He-Molate Gee	
MCDONALD	Giselle Tessa	
MNGWENGWE	Sihle Alfred	
MNYANDU	Mhlonishwa Satisfied	
NAIDOO	Deolan	
NDLOVU	Siyanda	
NEWAL	Denisha	
NGOBESE	Khulekani Hendrik	
NXELE	Penelope Nonjabulo Nomalungelo	

**Degree of Bachelor of Technology in  
ENGINEERING: ELECTRICAL (Heavy Current)**

BANSIPARSADH	Devesh Jaraj	
BIYELA	Zanele Sandlesihle	
BLY	Nozibele	
BUTHELEZI	Mathapelo Nolwazi	
CEBEKHULU	Londiwe Khombisile	
CELE	Richard Khulekani	
CHINNARAJULU	Adrian	
DELEKI	Ziyanda	
DLAMINI	Nombukiso	
DLAMINI	Sandile	
DLAMINI	Snobuhle Nelisiwe Portia	
DLAMINI	Zwelihle Wiseman	
DUMA	Bongumusa	
FAKUDE	Fanele Zine	
GAMA	Snothile Mbalenhle	
GOVENDER	Kreolin	
GUMBI	Mandisa Sybil	
GUMEDE	Angel Thembelihle	
GUMEDE	Bekezela Ndlaleni	
GUMEDE	Mandla Mediator	
GUMEDE	Ndumiso Ntokozo	
GUMEDE	Nokuthula Angel	
GUMEDE	Nomthandazo Patience	

GUMEDE	Siyanda Nhlakanipho Bright		MZILA	Nondumiso Penelope	
GWALA	Nomkhosi Precious Sinenhlanhla		MZOBE	Melusi Trevor	CUM LAUDE
HADEBE	Thokozani Douclas		NAIDOO	Jesse Nathaniel	CUM LAUDE
HANIFF	Sudesh		NAIDOO	Nishen	
HASSIM	Muhammed Zafar		NATHANIEL	Matthew Charles	
JEZA	Samukelisiwe		NDLELA	Lizwi Bongwiwe	
JUGLAL	Juhi	CUM LAUDE	NDLOVU	Scelo Velemseni	
KALALA	Sarah Tshibola		NDLOVU	Siphamandla	
KAMALALL	Sudheer		NDWANDWE	Bongiwe Nothile	
KHAN	Mohammed Thofeek Inthiaz		NDWANDWE	Talent Ronald	
KHANYEZA	Sihle Hastings		NGCOBO	Nkosinathi Sifiso	
KHOMO	Ntombenhle Pearl		NGCOBO	Samukensiwe	
KHUMALO	Gladness Ntokozo Nonkosi		NGCOBO	Sandile Cyril	CUM LAUDE
KHUMALO	Mbali Pretty		NGEMA	Londizwi Luyanda	
KHUZWAYO	Marvel Sibonelo	CUM LAUDE	NGEMA	Phindile Zamantusi	
KHUZWAYO	Theminkosi Aubrey		NGQULUNGA	Thalente Victor	
KHWELA	Siphesihle		NGUBANE	Khulekani	
LEMBETHE	Innocent Sibusiso		NGUBANE	Nolthando	
LETARD	Julian Antoine		NGWENYA	Ntombimpela Patience	CUM LAUDE
LUBAMBO	America Bhekithemba		NGWENYA	Silindokuhle	
LUNGA	Zanele Zamalunga		NHLABATHI	Xolile Princess	
LUTHULI	Thabile Lillian		NJONGO	Dimpho Sisanda	CUM LAUDE
MABASO	Lindokuhle Samukele		NKOMO	Sithabile Prudence	
MADLALA	Masondo Nsimbi		NKOMO	Thabani Justice	
MAHARAJ	Kaveer	CUM LAUDE	NOMANDELA	Andile	
MAJOLA	Mpumelelo Sboniso		NTOMBELA	Dumisani	CUM LAUDE
MASINGA	Nomcebo Slindile		NTOMBELA	Lungani Brian	
MATHE	Sithembiso Brian	CUM LAUDE	NTSHANGASE	Mzwandile	
MAYAPPEN	Leevasen		NTULI	Khethukuthula Amanda	
MAYEZA	Ntombenhle Nomusa Precious		NXUMALO	Lizwi Promise	
MBHELE	Luyanda Nomfundo		NXUMALO	Thubelihle Lungile	
MBOVU	Lonwabo		NYONI	Nombulelo Prudence	CUM LAUDE
MBUTHO	Nduduzo Leon		NZAMA	Nduduzo Deon	
MBUYISA	Simphiwe		PARUK	Yusuf Imraan	
MCHUNU	Nomfundo	CUM LAUDE	RADEBE	Masesi Nongcebo	
MDIMA	Nokwethemba Wendy		RAJKUMAR	Rivash	
MDLADLA	Nomcebo Letetia		RAMDHANI	Shivek	
MDLALOSE	Zethu Winnie		REDDY	Nolita	
MDLULI	Nokuzola Valentine		SANGWENI	Londiwe	
MDUNGE	Patience Phindile		SHABALALA	Mtobisi Houston	
MFEKA	Simphiwe		SHABANGU	Langelihle Mthokozisi Quentin	
MGEYANE	Hlengiwe Mbo	CUM LAUDE	SHANDU	Simiso Khetha	
MKHIZE	Asanda Ntokozo		SHANGE	Innocent	
MKHIZE	Bongeka Rebecca		SHEZI	Bongumusa General	
MKHIZE	Lungisani		SHOZI	Mduduzi Handsome	
MKHUNGO	Sibusisiwe Nokwanda		SHUDE	Philile Princes	
MNCUBE	Bongumusa		SIBIYA	Hamilton Lethukuthula Mthandeni	
MNGOMEZULU	Bongani Sihawukele Wiseman		SIBIYA	Nhlanzeko Brightness Ntombizanele	
MNGOMEZULU	Simphiwe Nhlakanipho		SIBIYA	Sphamandla Innocent	
MNTAMBO	Mzamo Felix		SIKHAKHANE	Lungelo Siphesihle	CUM LAUDE
MOODLEY	Jason		SIKHOSANA	Zoleka	
MOSHOESHOE	Thato		SIMELANE	Penuel Khulekani	
MPONGOMA	Andisiwe Sinazo	CUM LAUDE	SINGH	Kuvesan	
MSANE	Mzamo Richard		SITHOLE	Nomakhosi Valentine	CUM LAUDE
MSANI	Soloko		SITHOLE	Samukelisiwe Nongcebo	
MTHEMBU	Nhlakanipho		SITHOLE	Sinenhlanhla Cynthia	
MTHEMBU	Nichollette Sibongile		SOMANA	Nonjabulo	
MTHEMBU	Sithandiwe Precious Thembekile		SOMARU	Kayleen	
MTHOMBENI	Mixo Edmon		SONILAL	Sunisha	
MWELASE	Mthobisi		SONTSELE	Qaphelani	
MYEZA	Milliza Nomzamo	CUM LAUDE	*SOOKOO	Shivek	CUM LAUDE

\* Dean's Merit Award for Academic Excellence

TEMBE	Ntombifikile Bridget	
TENZA	Mbuso	CUM LAUDE
THABETHE	Sithembiso Lucky	
THABETHE	Thembeke Nokulunga	
TINYANE	Ramano	
ZONDI	Ntuthuko	
ZULU	Gabisile Primrose	
ZULU	Luyanda Sbahle	CUM LAUDE
ZULU	Nobuhle Snenhlanhla	
ZULU	Sithembile Sinethemba	
ZUMA	Natasha Slindokuhle	

**Degree of Bachelor of Technology in  
ENGINEERING: ELECTRICAL (Light Current)**

BANZA	Lubaba Erick	CUM LAUDE
BUTHELEZI	Mbuso Mhlengi	
CELE	Nontuthuko Prosperity	
CHANDERGUPTH	Jason	
CHEMBIAH	Kyle	
CHOTU	Nivesh	CUM LAUDE
DIKO	Lihle Brian	
DLAMINI	Mthobisi Love-More	
DLAMINI	Thina Aneth	
GAMBU	Mathemahle Prophet	
GOBA	Kufanelesibonge	
GOUNDEN	Shivaan	
GOVENDER	Melisha	
GOVENDER	Thangappen Poonsamy	
GUMBI	Banele Octavia	
GUMEDE	Immaculate Amanda	
GUMEDE	Thobani	
GUMEDE	Zinhle Ignacia	
HAMMOND	Tubal Caleb	
HANIFF	Nausheina	
HARIPARSAD	Naval	
HLATSHWAYO	Phumzile	
JERG	Dylan	
KHOWANE	Velile Martin Thandokuhle	
KHUMALO	Maxwell Siphamandla	
KHUMALO	Thabani Desmond	
LALLA	Akshay	
LUBABA	Nshimbi Heritier	
MADIDA	Mxolisi	
MAHARAJ	Sasheel	
MAHOMED ZUBHAR	Uwais	
MAJOLA	Zintle	
MAKHANYA	Ntombikayise Silindile Hazel	
MAKHAVHU	Nzumbululo	
MANANA	Sibongiseni Emmanuel	
MATHEWS	Liam Quaid	CUM LAUDE
MBATHA	Mbalenhle Silindile	
MDHLULI	Nonhlanhla Bridget	
MIYA	Nkanyiso Brightman	
MLIMI	Wendy Jansen	
MNGOMA	Thabiso Innocent	
MOODLEY	Kaylan	
MPANZA	Nonjabulo	
MSELEKU	Nondumiso Peace	
MTHETHWA	Sibonelo Maqhawe	
MTHETWA	Andiswa	
MYENI	Kwanele	

NAIDOO	Celine	
NAIDOO	Shaylin	
NDALIKA	Mujinga Parfait	
NKOSI	Kwanele Fanelesibonge	
NXASANA	Busisiwe Randy	
NXUMALO	Tebenguni Makhosazana	
NZIMANDE	Ntethelelo Tavior	
OMARJEE	Shuaib	
PHETHA	Cebile Patience	
PILLAY	Sathasivan	
RAMJEETH	Praveen	CUM LAUDE
REDDI	Magan	
*REDDY	Saieshan	CUM LAUDE
SIBIYA	Zethembiso Khombisile	
SIMELANE	Mfundo Handsome	
SINGH	Vinod	
SITHOLE	Thabani Lungani	
SOKHELE	Ndumiso Armstrong	
ZIKHALI	Phakamani Cyril	
ZULU	Mxolisi Bethuel	
ZUMA	Siphesihle Theminkosi	
ZUNGU	Malusi Mzwakhile	

**Degree of Bachelor of Technology in  
ENGINEERING: INDUSTRIAL**

BIYELA	Khayelihle Sifiso	
DLAMINI	Ntombizile Nothando	
DLUDLA	Siphelele	
GABELA	Malibongwe Thobani Thembenkosini	
GQADA	Thina	
LAALJE	Neval	
LANGA	Sandra Esperansa Silva	
LATIFF	Muhammad Sarfaraaz	
LINDA	Silindile Nonkululeko	
LUTHULI	Ziphonzonke Sindisiwe	
MAJOLA	Sihle Wellington	
MALINGA	Thabiso	
MATHONSI	Sithabiso Mbulelo	
MBANJWA	Yenziwe	
MBATHA	Thubelihle Willheart	
MCHUNU	Phindile Promise	
MDAKI	Luthando	
MDLALOSE	Nosipho Phamela	
MDUBEKI	Nolubabalo	
MKHIZE	Thulisile	
MNGADI	Nsika Simphiwe	
MOODLEY	Kyle	
MOTUBATSE	Mamodishe	
MTHEMBU	Thubelihle Suprise	
MTHETHWA	Nonhlahakahle	
MTHETHWA	Phiwakahle Nozipho	
MTHETHWA	Thamsanqa Sibongokuhle Knowledge	
NDINISA	Nonsikelelo Nonhlanhla Prudence	
NDLOVU	Thokozani Andrew	
NDWANDWE	Banele Christian	
NEMUKULA	Zwashu	
NGCOBO	Silindokuhle Lusanda	
NGEMA	Samkele Lindani	
RABIKOOSUN	Kayan	
THAMBIRAN	Kreuben	
THAMBIRAN	Shamreen	

\* Dean's Merit Award for Academic Excellence



TSHAWANE ZULU	Nolwazi Trinity Sibonelo	
<b>Degree of Bachelor of Technology in ENGINEERING: MECHANICAL</b>		
BALMINT	Akshay	CUM LAUDE
BANZE	Ilda Lucia Joao	
BECHOO	Tarish Romanand	
BHEMBE	Lunga S'Phesihle Maqhawe	
BHENGU	Mzamo	
BIYELA	Phumlani Thuthukani	
CHAITHRAM	Tharish	
CHAMANE	Shlobosenkosi Blessing Omega	
CHETTY	Diveshan	CUM LAUDE
CHETTY	Piroshin	
COLE	Tevan Jason	
DASRATH	Jusvina	CUM LAUDE
FAKU	Wongalethu	
GCABA	Nduduzo Innocent	
GOUNDEN	Kimendren	CUM LAUDE
GOVENDER	Direshen Dysten	
GOVENDER	Jenalee	CUM LAUDE
GOVENDER	Kailin	
GOVENDER	Malcolm	
GOVENDER	Sachin	
GOVENDER	Shailen Jugathesan	
GOVENDER	Sumeshan	
HAPPI MIEGUE	Steve	
HEMRAJ	Sashin	
JALI	Sandile	CUM LAUDE
JEEWANLALL	Aran	CUM LAUDE
JITLALL	Dasheel	
KHUMALO	Lungelani	
KHUZWAYO	Zwethanda	
*KUNENE	Njabulo	CUM LAUDE
KUPPASAMY	Shalen De Marco	
KWEYAMA	Nkululeko Freedom	
LANGA	Siphesihle Buyani	
LOUVIE	Lindani Remnant	
LUCHOOMAN	Minesh	
MAHARAJ	Tareesh	
MAHLABA	Lwazi Lungani Sphesihle	
MAKHASANA	Sanele Andrew	
MANYATSI	Thulani Leonard	
MBONAMBI	Ncamokuhle Sphumlile	
MBULI	Mzokhulayo Outtor	
MCHUNU	Sinenhlanhla Siyathokoza	
MDLULI	Cebisile Zamekile Precious	
MEERAN	Daanish	
MENDES	Ricardo Jose Leite	
MHLONGO	Mfundiso Mpilo	
MICHAEL	Allistair	CUM LAUDE
MKIZE	Mxolisi Siphesihle	
MNGOMA	Ezile	
MNUKWA	Ntandazo	
MOODLAYIAR	Tashlin	
MOODLEY	Brandon Noah	
MOTILALL	Byron Bervin	
MUGAN	Akshay	
MUNSAMI	Desigan	
MYEZA	Ayanda	

MZIMELA	Zamani Benjamini	
NAICKER	Roann	
NAIDOO	Leshanthini	
NAIDOO	Rovanee	
NCOKWANE	S'Phelele	
NDHLOVU	Mncedisi Success	
NGOBESE	Jomo Mlungisi	
NTIKANE	Livhuwani	
NTSHALINTSHALI	Nosipho	
NTULI	Mondli Sizwe	
NXUMALO	Wandile Mnqobi	
OELOFSE	Jason David	CUM LAUDE
PADAYACHEE	Yaidene	
PAUL	Linton John	
PERUMAL	Lucius Lloyd	
PILLAY	Kylan Kyle	
PILLAY	Leolin	
PILLAY	Sheldon Trey	
PRETORUIS	Wynand Johannes	
RAJKARAN	Yastha	
RAMSANDER	Shive	
RAMSUROOP	Shovir	
REUBEN	Earl Remon	
RIDHOO	Renesh	
ROSS	Nicholas Richard	
RUTHNAM	Dharshan	
SEWNATH	Saien	
SEWPARSAD	Maniv	
SEWPERSAD	Kaylin	
SHANMUGAM	Thameshen	CUM LAUDE
SHELEMBE	Mfundiseni	
SHEZI	Andile Prince	
SHOBA	Bhekithemba Sunrise	
SINGH	Asthieel	
SINGH	Shikhar	
SIVBADHAN	Tamica	CUM LAUDE
SLADE	Shaun Geary	
SOMANNA	Wayne Lionel	
THWALA	Halalisani Praisegod	
VAN DER MERWE	Jacobus Cornelius	
VANDAYAR	Kaylin	
VENKETSAMY	Pravean	
XULU	Muziwenkosi Thabani	
ZUNGU	Calvin Thabiso	
ZUNGU	Nqabenhle Mhayeni	
ZUNGU	Thabiso Khifikwane	

<b>Degree of Bachelor of Technology in QUANTITY SURVEYING</b>		
BANTI	Phiwokuhle Yinkosi Yanga	
BORERWE	Artwell	
BOYANA	Luyanda	
BUTHELEZI	Sinegugu Precious	
CAKO	Asanda Tembela	
CHAMANE	Lusanda	
CHETTY	Renny Royeppen	CUM LAUDE
COETZEE	Byron Grant	
DIKO	Sibongile Ndileka	
DIPA	Zizipho	
DLAMINI	Siphokazi Faith Theodosia	
DLAMINI	Thembanani Alfred	

\* Dean's Merit Award for Academic Excellence



DLAMINI Ayanda Ndumiso  
 DLAMINI Lungani Olwethu  
 DLAMINI Mandla  
 DLAMINI Msizi Velaphi  
 DLAMINI Siphesihle Goodman  
 DLAMINI Thuthukani Bheliszwe  
 DLAMINI Zwelakhe Troy  
 DLANGALALA Sibusiso Senzosakhe Siwinile  
 GASA Sinenhlanhla Patience  
 GCABASHE Nosipho Nobuntu Lungelwa  
 GENGAN Duran Ranaldo  
 GOUNDER Kee-Leen  
 GOUNDER Quewen Ethan  
 GUMEDE Brilliant Nhlanhla  
 GUMEDE Thobani Innocent  
 GWEMTU Afanelekile  
 HADEBE Nzuzo Nkanyiso  
 HADEBE Thembelani  
 HLENGWA Siboniso Sicelo  
 JELE Zanele  
 KAVUNA Isaac  
 KHAMBULE Lindokuhle Nkululeko  
 KHUMALO Siphesihle Mgcineni  
 KHUMALO Vuyelwa Pollen Sabelo  
 KHUZWAYO Nomvula  
 LANGA Phelokazi  
 LUSHABA Nozipho  
 MABASO Langelihle  
 MABENA Thabang Archibald  
 MABUZA Sihle Sheelen  
 MABUZA Vuyo Sandile  
 MADE Mondli  
 MADINANE Silindelwe  
 MADUMA Junior Lwazi  
 MADUNA Thabile  
 MAGAUDENI Ndifikile  
 MAGELE Philani Protas  
 MAGUBANE Siphosethu  
 MAKHUBO Sandiso  
 MANGENA Siyanda  
 MANYANGA Khethokuhle Luvuyo Mnqobi  
 MATHENJWA Bongeka Sphumelele  
 MATHONSI Siphosethu Nhlalenhle  
 MATJIE Patriel Kgohlelelo  
 MAZIBUKO Sanele Xolani  
 MBAMBO Mpilonhle Wandile  
 MBAMBO Thabiso Sphephelo  
 MBANJWA Mzamo Wiseman  
 MBUYISA Sithembile  
 MDLALOSE Siphesihle Andile  
 MJADU Nondumiso Fikile Nosipho  
 MKHIZE Nolwazi  
 MKHIZE Ziningi Nondumiso  
 MKHONTO Ernest  
 MKHONZA Sanelile Nompilo  
 MKHWANAZI Lwandle Harold  
 MNGADI Qhawe Heroine  
 MNISI Siyabonga Wellington  
 MOHAMED Mohamed Abdalla  
 MOLELENGOANE Thapelo Joel  
 MOLOKOMME Given

MONDI Mazini  
 MOTAUNG Noluthando  
 MPISANE Mnqobi Aubrey  
 MPUNGOSE Mnqobi Bright  
 MSOMI Phumelele  
 MTHEMBU Ndumiso Khayaletu  
 MTHEMBU Zinhle Francisca  
 MTHETHWA Siboniso  
 MTHETHWA Thokozani Prince  
 MTHULI Mthobisi Innocent  
 MTSHALI Mthandeni Doctor  
 MULOVHEDZI Israel  
 NDLOVU Nombulelo Samukelisiwe  
 NDLOVU Noxolo  
 NDLOVU Snegugu Lihle  
 NDLOVU Thembelihle  
 NEMATO Tarirai Alvin  
 NENE Ndumiso  
 NGCECE Nompumelelo Fancier  
 NGOGWANA Nzokozo Gift  
 NGQULUNGA Lungile Ntombenhle  
 NGUBANE Siyabonga Mfundo  
 NHLENGETHWA Siyabonga Madoda  
 NSIBANDE Manqoba Sinenhlanhla  
 NTSHELE Ntokozo  
 NYAWO Lungile Princess  
 NYAWOSE Nomkhosi  
 NZIMANDE Samukelisiwe  
 RABICHAND Ashaylen  
 RAMJEAWON Manish Roshenlal  
 SHANGE Thabani Msizi  
 SHELEMBE Kholeka Precious  
 SHEZI Noxolo Muhle Victoria  
 SHONGWE Nkululeko Ivan  
 SIBEKO Nhlakapho Afikile  
 SIKAKANE Bongumusa  
 SITHELA Ayabulela  
 SITHOLE Boniswa Portia  
 TSOTETSI Bonani Mthokozisi  
 XABA Sibulelo Blessing  
 ZONDI Hlanganani Moses  
 ZULU Luyanda Ndabezinhle Sifiso  
 ZUMA Phindokuhle

### National Diploma in ARCHITECTURAL TECHNOLOGY

MANGARU Keanen  
 MBUYISA Bonginhlanhla Falakhe  
 MEERAN Jauhara  
 MOLOTO Kholofelo Violet  
 MOODLEY Eugeshen  
 MSANE Sanele Handsome  
 MTETWA Njabulo Praiseman  
 NAIDOO Sashlin  
 PILLAY Kamishrin  
 ZITHA Nomathemba Noluthando



### National Diploma in BUILDING

GARANE	Sanelisiwe
KHAWULA	Silondile Potus
MALAPILE	Makwena Edward
MASHABA	Xitshembiso Given
MASUKU	Njabulo Luyanda Fleance
MBONGWE	Sibusiso Treasure
MDLALOSE	Nokwanda Phumla
MDUNUSANA	Samkelisiwe
MHLONGO	Mholi Treasure
MJINDI	Asitandile
MOONSAMY	Pooja
MORENA	Morena Badisheng
MPONDOMBE	Lungile Tholakele
NDEBELE	Nokukhanya Bridged Sinethemba
NDLOVU	Nhlakanipho Lucky
NGEWU	Bathandwa
NHLEKO	Sifanele Manelisi
NKOSI	Siyabonga Sifiso
NTAKAZANA	Wezile
NTULI	Ofetse Yvonne
SEWPAL	Kajal
SHABALALA	Gcinile
SHABALALA	Nhlanhla Lucky
VEZI	Thembelani Minenhle
XIMBA	Godfrey Dumisani
ZONDI	Siboniso Ronaldo
ZULU	Simele Thobani

### National Diploma in ENGINEERING: CHEMICAL

BHENGU	Ndumiso Laurence
BUTHELEZI	Alpha Joseph
CHETTY	Cameron Jermaine
MAJAFE	Thembile Olivia
MASUKU	Chester Bonga
MDIMA	Gcinokwakhe
MDLULI	Ntando Pearl
PERUMAL	Theodore Duerell
RAMESHAR	Shemir
THANDABANTU	Aluvuyo

### National Diploma in ENGINEERING: CIVIL

ADEYEMI	Moses Oluwasegun
BUYEYE	Ntando Sixhamle
CHINNA POLIGA	Tevin
CHONCO	Khulani Qiniso
DA SILVA	Lucian Alberto
DLAMINI	Mangethabe Vusumuzi
FUHRI	Chase Ridge
GIYAMA	Indipile Buhle
GOVENDER	Kelvin
KUNENE	Sijabulile Mary-Jane
MBHELE	Sfundo
MKHIZE	Njabulo Mhlengi
MKHIZE	Sifundo Cedrick
MOODLEY	Priniven
MUNJOMA	Tinashe Ashlee
NAIDOO	Jayprishanth Sivaprakash

NIKWE	Sinothile
NYABA	Thamsanqa Manqoba
NZIMANDE	Sanelisiwe
NZUZA	Mhlengi Philasande
NZUZA	Siyabonga
RAMKLOWAN	Khamil Sanjay Hariduth
SHANDU	Smangele
SHEIK	Sheziq
SHEPHERD	Trent Joss
XULU	Hlobisile Angel
ZONDI	Mthokozisi Kwanele

### National Diploma in ENGINEERING: COMPUTER SYSTEMS

DLAMINI	Mangaliso Siyabonga
GWAMANDA	Nkanyiso Emmanuel
KHUZWAYO	Thobani Percival
MANDIWANA	Bonisiwe Beatrice
MASSEY	Andrew Winston
NARAINAN	Kreenasen
PILLAY	Bastian Macaliester
PILLAY	Shiveshni
SHANGASE	Lubabalo
XIVURI	Honey
YABILI	Nyembo Gael

### National Diploma in ENGINEERING: ELECTRICAL (HEAVY CURRENT)

CHETTY	Emilio Quinn
CHILI	Thokozani
CHRISTIAN	Angendu Mongenzo
GUMEDE	Nomfundo Zandile Innocentia
HLATSWALO	Sakhile Sifiso
KHESWA	Rodney Lindokuhle
MABINDISA	Siphiwe Sydney
MAJOZI	Goodwill Mbusiseni
MAZIBUKO	Phumulani Hamilton
NKANINI	Mfanelo Ayester
NKOSI	Bhekisisa Mngqobi
NTSHANGASE	Sizwe Siphiwe
NXUMALO	Sbongiseni Wiseman
PALM	Noluthando Zinhle
RAMLALL	Ramon
SHANGE	Sicelimpilo Sandile
SIBISI	Msizi Siyabonga Wilfred
SIBIYA	Njabulo
SOKHELA	Celiwe Tshengisile
TEFO	Gordon Katlego
VILANE	Sihle Lorenzo

### National Diploma in ENGINEERING: ELECTRICAL (LIGHT CURRENT)

ABDULLA	Muhammad
BHENGU	Lynette Zinhle
CIKWAYO	Teenage Bhekisisa
DLAMINI	Ignecia Lungelo Nontuthuko
GOVENDER	Makaylin
GUMEDE	Kwenzeka Thulani
KHOZA	Ntuthuko Wiseman
KHOZA	Sandile
KHWELA	Thandeka

LUKHELE	Manqoba Senzo
MADIKIZELA	Lihle
MADLALA	Sibusisiwe Wendy
MADONSELA	Mxolisi Comfort
MAZIBUKO	Sandile Jabulisa
MBAMBO	Eraser Nomzamo
MCINEKA	Nhlanhla Lucky
MFEKA	Lethiwe
MHLONGO	Lethiwe
MHONE	Mpendulo Mickey
MKHIZE	Sizwe Seluleko
MKHIZE	Zamokuhle
MLAMBO	Sthenjwa Percival
MNCWABE	Mzamo Bruce
MNGWEVU	Nokwanda Nokuzotha
MPULO	Lindokuhle
MSEZANE	Sandile Fortune
MTETWA	Velempilweni Mxolisi
MTOLO	Hero Mzwakhe
NAIDOO	Ashley Allen
NAIDOO	Avishan
NAIDOO	Nivolen
NDLOVU	Minenhle Mlondi
NDLOVU	Sanele Prudence
NGENGE	Luvile
NONO	Lethu Micky Sibusiso
NTULI	Sibonele France
RADEBE	Andiswa
REDDY	Aziel Jerushan
SHANGE	Msizi Welcome
SOOKOO	Yashik
TEMBE	Sinenhlanhla Siphesihle
ZULU	Mandisi Lindelwa

#### National Diploma in ENGINEERING: INDUSTRIAL

DLADLA	Njabulo Ntokozo Percival	
GOOLAM	Saaliyah	
GOVENDER	Kylan	
LUTHULI	Miselo Lungelo	
MAKHATHINI	Nhlakanipho Innocent	
MAKHAYE	Msizi Mathews	
MAPHUMULO	Thando Happy	
*MBATHA	Sindiswa Senelisiwe	CUM LAUDE
MBHELE	Andile	
MDLULI	Siphamandla Sibusiso Tshepo	
MDLULI	Sipho	
MEMELA	Mthobisi	
MKHIZE	Gcinile	
MNGUNI	Sithembiso Langelihle	
MSIBI	Nkosingiphile	
MTSHAKAZA	Nzolo	
MUSAU	Tshisuaka	
NDLOVU	Sisasenkosi Raphael	
NGIDI	Andile Noluthando	
NGUBENI	Bafana Nhlakanipho Ernest	
PANGUANA	Tulipe Sibongile	
SHABANGU	Nkululeko Alex	
SITHOLE	Nkosingiphile Lucky	
SITSHANGE	Siphumelelo	

ZONDI	Lungelo Emmanuel
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#### National Diploma in ENGINEERING: MECHANICAL

BOURAS	Ihron
CEBEKHULU	Nhlakanipho Khulanensizwa
DEBINARAIN	Akkira
DLAMINI	Nompilo
GOVENDER	Christopher John
HLATSHWAYO	Kwenele Zama
JANGE	Siyabonga Wiseman
KANNIGADU	Shannon
KHESWA	Msizi Vincent
KHUMALO	Michael
MAPHUMULO	Mfundo Swelihle
MAPHUMULO	Nkululeko
MATHIMBA	Mphakamisa
MBANGATHA	Siviwe
MBUWENI	Lizo Samkelo
MHLAKWANA	Thembaletu
MISRA	Keshav
MJILA	Banele Thandokuhle
MOYANA	Isak Dumisani
MTHEMBU	Sihle Brian
MTHIYANE	Ntandoyenkosi Immanuel
MUTHALIB	Ayesha Siddiq
REDDY	Prialan
SINGH	Mikar
VORAJEE	Zakir

#### National Diploma in PULP AND PAPER TECHNOLOGY

CHETTY	Shivani
MABUNDA	Nomthandazo Glenda
MBOTHWE	Olwethu
MGABHI	Smangalis Fezile
MLAMBO	Thabiso
MTHETHWA	Ayanda
MTHIYANE	Bongakonke
NDLANGAMANDLA	Nkosiyapha Cebo
NTSHANGASE	Thembelihle
ZONDI	Sanele Ronald

#### National Diploma in SURVEYING

AMISI	Abdallah
CELE	Lungiswa Nomasonto
CELE	Sibongiseni Joshua
DHLAMINI	Nokwanda Nozipho
MKHWANAZI	Nqobile Mary
MTHEMBU	Sibongakonke
NAIDOO	Mishola
NTSHANGASE	Nosipho Kwenzi
PHAKATHI	Nkazimulo Sinenhlanhla
SIMELANE	Pamella
SITHOLE	Siphelele Vincent

#### National Diploma in TOWN AND REGIONAL PLANNING

MCOBOTHI	Siseko
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