



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Engineering,
Built Environment and
Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en
Inligtingtegnologie / Lefapha la Boetšenere,
Tikologo ya Kago le Theknolotši ya Tshedimošo

Department of
INFORMATICS

Newsletter

May 2019

School of Information Technology Prize Giving Acknowledging great achievement

On 17 May 2019, the School of Information Technology (IT) hosted their annual prize giving to acknowledge great academic achievement from its students.

The Department of Informatics recognized achievers in the BCom Informatics degree, as well as in the B IT degree. Across all years of study, the undergraduate top achievers and runners up, as well as the post-graduate Honours degrees, received prizes made possible by great support from sponsors of the Department.

A special award, *Women in ICT Award*, sponsored by the Institute of Information Technology Professionals South Africa (IITPSA), was awarded to an all-girls team for an outstanding final year project as part of the module INF 370. The project entailed the end-to-end development of a fully operational software solution for a real industry client and featured a nursery management solution with plant management, ordering features, as well as mobile- and web application interfaces.

Congratulations and well done to all achievers! ■



Mr Zubair Moosa received, among many other awards, the best achievement over all 3 years of the BCom Informatics degree award.

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Left to right: Nadine Ferreira, Nicole Davisson, Tony Parry (IITPSA), Jessica Munro, Nandipha Dilla, Lanné du Preez and Lizette Weilbach (Lecturer).



From Prof Carina's desk

Almost at the end of the semester, the Department of Informatics can look back at months filled with a wide variety of activities, on point teaching and learning, beneficial engagements and acknowledgement of achievements. This issue of our Newsletter provides just a peep into what was achieved this semester!

We kicked off 2019 with a significant number of under- and post-graduate students, guiding students during orientation week and ensuring that the first year students could embark on their academic career with a solid start.

The JCP award function, autumn graduation

and School of IT prize giving were all testament to a job well done, whether it was making a difference in the community through service learning or whether it was academic excellence!

You can also meet our newest member of staff, Tendani Mawela that joined the Department at the beginning of the semester. A special welcome to Tendani—although, after a semester of lecturing, tests and marking assignments, she is an “old hand” already!

We are looking forward to the next semester and the opportunities it may bring. May we again experience great achievements and learning acuity ! ■

University of Pretoria host FHNW students from Switzerland



The University of Pretoria combined efforts from the Departments of Informatics and Mining to host a group of 19 visitors from the University of Applied Sciences and Arts Northwestern Switzerland (FHNW) on 4 February 2019.

The theme for the day was *Combining Mining and Technology*. The visitors were first taken to the Cullinan Diamond mine where they were hosted by Pieter Boshoff and his team. As part of their visit they did an underground tour and were also shown real-life examples of dashboards through which mining activities are monitored. In the afternoon the group returned to the University of Pretoria where Janie Maritz introduced them to the Kumba Virtual Reality (VR) Centre in the Mining department and discussed how virtual reality technology is used in their teaching in the department. This was followed by a presentation by Prof Alta van der Merwe on the University of Pretoria and the EBIT Faculty, and the afternoon program was closed by Kalley Coleman (a PhD student in Informatics) sharing her experiences as a student at the Department of Informatics. FHNW and UP have a long-standing relationship and we believe that this visit strengthens the collaboration between the two universities. ■

ACADEMIC SEMESTER OVERVIEW

More than 6 000 students kicked off their academic year in 2019 in the Department of Informatics probably with great expectations and multiple levels of motivation. Motivation is a key factor in the success of students at all stages of their education. At the beginning of an academic year, the weeks go by smoothly in a flurry of activity guided by great enthusiasm. The trick is to maintain this level of motivation as the semester progresses and lecturers play a pivotal role in providing and encouraging that motivation in their students.

From an undergraduate perspective, 5 322 students enrolled for 2019 across 16 undergraduate modules in the B Com (Informatics) degree as shown in the table below. The undergraduate modules prepare students for their final year project (INF 370) where they elicit requirements, design, develop and operationalise an end-to-end system for an industry client. This third year module is deliberately structured to offer hands-on practical training and real world experience to students that may enter the corporate environment after they graduate.

INF 112 Introduction to information systems	1368
INF 113 Introduction to quantitative methods	213
INF 154 Introduction to programming	324
INF 164 Programming	337
INF 171 System analysis and –development methods	362
INF 214 Database design	349
INF 225 Overview of systems infrastructure and integration	206
INF 261 Database management	228
INF 264 Application of spreadsheets and query languages in an accounting environment	863
INF 271 System analysis, -design and – construction	207
INF 272 Advanced programming	208
INF 282 Computer processing of accounting information	274
INF 315 Current trends in the application of information systems in business	97
INF 324 Information systems in organisations	104
INF 354 Advanced programming	93
INF 370 Application of systems analysis , design and development in a practical project	89

A total number of 5 322 undergraduate students started the academic year across 16 modules in 2019.

Successful and unsuccessful people do not vary greatly in their *abilities*. They vary in their *desires to reach their potential*.

—
JOHN MAXWELL

From a post-graduate perspective, 129 students initiated their Honours studies (110 in Hons BCom and 24 in Hons BIT) and 19 students enrolled for the Post-graduate Diploma in Digital Innovations. The Masters Degree (MIT) in ICT Management kicked off with 46 students that have to complete course work, as well as a mini-dissertation showcasing their academic research capabilities. Past MIT students' motivation about the degree:

- “With the degree I get recognized as someone who can contribute to an organization or business unit strategically.”
- “I have certainly become a better IT manager with lots of confidence and have become more involved in the business.”
- “Very good degree that provides a very relevant overview of IT for both management and higher level technical personnel.”
- “I think the value of the degree is for people that want to move into management structures (senior levels) of IT in organizations and it gives them a broad perspective of the different disciplines and what each of them entail.”

More than 50 students embarked on their full Masters and PhD studies.: full Masters degree, 25 students and PhD studies 28 students. These students complete a compulsory 6-month seminar course where strong focus is placed on research methods, IS theories, and thinking about IS. The theory is assessed through individual assignments, all structured to assist students with completing high-quality research proposals submitted at the end of the 6 months.

“Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time.” – Thomas A. Edison ■

Department of Informatics Orientation Week

On 28 January 2019, the Department of Informatics hosted its Informatics Information Session for Orientation Week. It was attended by over 90 first year students and all relevant information regarding the Department of Informatics was shared. In addition, the social media platforms where relevant departmental information is published, were introduced. The students that attended the #chooseUP day in 2018, participated in a lucky draw and the winner, Arisja Botes, received a R5000 bursary towards her studies in Informatics.

A special thank you to the assistant lecturers that ensured that all went well with the orientation programme and for working hard to guarantee that the first years had a great experience! ■



Dr Marita Turpin addressed the first year Informatics students during Informatics Orientation Week.

Prof Carina de Villiers and Arisja Botes.



Community-based Projects

a year of great achievements

The annual function of the JCP-module was held on Tuesday, 26 February 2019, at the Aula. Fifty-one of the 411 groups were invited to the function and were acknowledged for their hard work and outstanding projects during 2018 (photo below). Most of the projects focused on renovation, mathematics and science education, animals and career guidance initiatives. The teams made a significant and lasting difference in their respective communities during 2018!

Robyn Ingle-Möller from Lory Park Animal and Owl Sanctuary (photo right), was acknowledged by the Community-based Project Module (JCP) for being involved in the module for the past 12 years. She mentored more than 1201 students and 310 groups, first at the National Zoological Gardens of South Africa. Later at Bester Birds and Animal Zoo Park and for the past two and half years at Lory Park Animal and Owl Sanctuary. She mentors between 20 and 25 groups per year. ■

Please watch the JCP module promotional video:

<https://youtu.be/RhSYaQp8uGc>

From left to right: Dr Martina Jordaan (JCP-lecturer), Prof Carina de Villiers (Head of Department of Informatics), Prof Sunil Maharaj (Dean of the Faculty of Engineering, Built Environment and Information Technology) and Robyn.





AUTUMN GRADUATION

The autumn graduation ceremony was a celebration of achievement for students in the Department of Informatics. It was a wonderful event shared with family, friends and colleagues to acknowledge success before moving on to the next phase of either further studies or career!

Thirty-three students received their Masters in Information Technology: ICT Management degree and 5 students obtained their Masters in Commerce degrees. One student was awarded a PhD degree.

Wishing all students that graduated a hearty congratulations and well done! ■



Assistant lecturers Nabeel, Jessica, Marissa and Gareth after receiving their BCom Informatics degrees at the autumn graduation. They are now busy with their Honours studies.

**Department of
Informatics**

**Popular
Press**

Prof Alta van der Merwe and Prof Aurna Gerber:

Making sense of the fourth industrial revolution

[https://www.itweb.co.za/content/6GxRKqY8p1JMb3Wj?
fbclid=IwAR3cXk6VYMYIMoRc96HhLAN2wG5QUhdYKgyda-GwgisT5LJ80LUtsGEoCA](https://www.itweb.co.za/content/6GxRKqY8p1JMb3Wj?fbclid=IwAR3cXk6VYMYIMoRc96HhLAN2wG5QUhdYKgyda-GwgisT5LJ80LUtsGEoCA)

Dr Tania Prinsloo:

Lessons from Namibia on curbing the spread of foot and mouth disease

<https://theconversation.com/lessons-from-namibia-on-curbing-the-spread-of-foot-and-mouth-disease-109838>

Meet Tendani Mawela



Tendani recently joined the Department of Informatics

She is lecturing INF154 and 164 - C#, INF 324 Data management, trends in IT and MIT 850 - Life cycle and maturity models.

Tendani is a former technology and management consultant who joined the world of academia in 2012. During her consulting years, she worked on a variety of projects within the private and public sectors. Her professional experience includes project management, systems analysis and design, programming and change management.

She completed her PhD (Informatics) degree at the University of Pretoria in 2015 where she focused on the conceptualization of Transformational Government (t-Government) towards socio economic development. Her current research interests include Digital Government, ICT for Development and Digital Skills and she has published journal and conference papers within these areas.

Tendani is married to Lucas and is a mom of three soccer loving boys (Tokelo, Tshwanelo and Tlotliso) and enjoys reading, music and travelling in her spare time. ■



Tokelo Tlotliso, Lucas and Tshwanelo



School of IT research grant winners

Towards a data science competency model for South African organisations

- Marié Hattingh
- Linda Marshall
- Marlene Holmer
- Rennie Naidoo

Extracting success factors for education using a data-driven approach

- Vukosi Marivate
- Marié Hattingh
- Victoria Rautenbach
- Henry Wandera
- Hanlie Smuts
- David Sengeh

