Annual Report and Audited Financial Statements

of the University of Pretoria

Reports and consolidated financial statements for the year ended 31 December 2022, prepared in accordance with section 41, read with section 69 of the Higher Education Act, 1997 (Act No 101 of 1997, as amended), and the regulations for annual reporting by higher education institutions published as Government Notice No R 464 in Gazette No 37726 of 9 June 2014

June 2023



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Driving societal impact

The University's vision and strategic goals deliberately position UP as a central player in the country's advancement. Our overarching institutional identity positions us as a university that is interconnected with society and is alive to its central role of contributing to the advancement of South Africa, Africa and the world. In the words of John Henry Newman¹, we are "a place [...] whither students come from every quarter for every kind of knowledge; [...] a place for the communication and circulation of thought [...] It is a place [...] in which the intellect may safely range and speculate. It is a place where inquiry is pushed forward...discoveries verified and perfected, and [...] error exposed, by the collision of mind with mind, and knowledge with knowledge". We are actors in broader society; a national asset that is socially responsive and seeks to impact society meaningfully. Our vision of becoming *a leading research-intensive university in Africa, recognised internationally for its quality, relevance and impact, and also for developing people, creating knowledge and making a difference locally and globally, positions us to engage with contemporary, emerging and future societal concerns and priorities.*

Since the collapse of apartheid, universities in South Africa, including UP, are called upon to be vanguards in advancing the transformation and development imperatives of the post-apartheid dispensation. The country's high levels of inequality are a challenge with which South African higher education institutions and UP must contend. The unacceptably high levels of inequality in the country are linked, *inter alia*, to the lower skill levels among marginalised communities. In this regard, we are a major producer of skilled graduates, especially in scarce skills areas such as engineering, life and physical sciences, initial teacher education and health and animal sciences.

Providing educational opportunities to students from diverse communities and undoing the regressive effects of socio-economic background on educational achievement are important national imperatives which UP continues to address. We have several programmes with high schools in disadvantaged areas to ensure that greater numbers of students from marginalised communities can attend higher education institutions. Consistent with the imperative to undo historical injustices and advance transformation, we have continued to grow the proportion of black students at both undergraduate and postgraduate levels. Black students now constitute more than 65% of our contact undergraduate and postgraduate students.

Our research strategy manifests our total commitment to addressing complex societal challenges and transforming lives and communities. We aspire to advance the frontiers of knowledge and to make a positive impact on the world by focusing on areas of significant societal need where creative and innovative responses to major challenges can provide new solutions, in a rapidly changing environment. We have demonstrated our research impact in diverse areas, including human and animal health, astronomy, forestry, biotechnology, food, nutrition and well-being, governance and human rights, artificial intelligence and economics and business.

Community engagement (CE) is an important pathway through which we impact communities. In 2022, 15 000 students participated in curricular CE activities, involving more than 3 000 projects, with over 1 000 community partners in various parts of Pretoria, including Mamelodi, Eersterust, Pretoria North, Pretoria West and the Pretoria Inner City (including Sunnyside and Hatfield). Through CE, our students develop critical inquiry skills and dispositions, interdisciplinary perspectives,

¹ Newman, J.H. (1852) *The idea of the university*. London: Aertena Press.

intercultural competencies and consciousness, and emerge as engaged and civic-minded citizens. Further, it links the research and teaching skills of our staff and students to the specific needs of individual communities, thus advancing the public good by impacting communities positively.

The University is an anchor institution in its communities, with a direct effect on the local economy, the safety and security, well-being and sustainability of our people and environment. Our institutional anchor strategy is underpinned by the philosophy of mutually beneficial and symbiotic relationships with our community stakeholders. UP is one of the largest employers in the City of Tshwane, generates jobs, purchases huge amounts of goods and services, attracts businesses and highly skilled individuals to the City, and makes a significant contribution to the City's economic development.

Overall, contributing to the economic and social advancement of society is an imperative that is nonnegotiable for UP. All our priorities, as captured by our strategic goals, reflect a deep institutional commitment to addressing the development challenges of the country. Our continued impact on society is primarily the outcome of our innovative approaches to teaching, learning, research and CE, which, *inter alia*, comprise hybrid teaching and learning, curricular transformation, transdisciplinarity in teaching, learning and research, our anchor strategy, and strong partnerships locally and internationally.

This Annual Report presents the University's important achievements in 2022. It demonstrates our excellence in teaching and learning and research, our contribution to society, and our role nationally and internationally. The report complies with the requirements of the Regulations for Reporting by Public Higher Education Institutions (Notice No R 464 published in Government Gazette (GG) No 37726 on 9 June 2014). The report is presented in three parts, namely:

- Part A: Reports of Council and Council Committees and the Vice-Chancellor (including the statements by the Council on governance, sustainability and transformation)
- Part B: University of Pretoria Performance Report for 2022
- Part C: Financial Review.

PART A

1. THE UNIVERSITY COUNCIL: FUNCTIONING AND COMPOSITION IN 2022

Council is responsible for governance, policy-making and compliance at the University and, in particular, establishing guidelines relating to strategic governance, financial governance, staff matters, fostering a positive academic atmosphere, disciplinary matters regarding staff and students, and the admission and language policies of the University in concurrence with Senate.

The University Council comprises 30 members appointed in terms of the Statute of the University as approved by the Minister of Higher Education, Science and Innovation and published in Government Gazette No 42127 of 21 December 2018. Eighteen of the 30 members, representing 60% of the composition, are external members, being neither UP employees nor students. The terms of office of Council members are determined by the Statute of the University.

In terms of the Statute of the University, Council elects a Chairperson from amongst the external members, who shall hold the office for a term of two years, after which Council may re-elect the incumbent for no more than two additional consecutive terms. In March 2021, Council elected Mr Kuseni Dlamini and Mr Ben Kruger to serve as Chairperson and Deputy Chairperson, respectively, for a period of two years.

It is the role of the Chairperson of Council to lead Council members in fulfilling their functions. The Vice-Chancellor and Principal is responsible for the management and administration of the University. The Statute of the University regulates which matters must be referred to Council for decision-making in terms of the Higher Education Act, No 101 of 1997 (as amended).

Council held three ordinary meetings and two special meetings in 2022. The agendas, minutes and attendance registers of the 2022 Council meetings are available to the Department of Higher Education and Training (DHET), upon request, from the Office of the Registrar. Consistent with the prior year, induction sessions were held for the newly appointed Council members, namely Prof MC Oosthuizen (newly elected Senate representative on Council) and the student representatives on Council, namely Ms T Mashila (SRC President) and Mr T Lalla (SRC Secretary-General). Information regarding the composition of Council, on which committees the members served and their length of service is provided in Table 1.1. Information on the members' directorships (i.e. Register of Interests) is available to the DHET, upon request, from the Office of the Registrar.

Council member	Committees on which the member served	Year of commencement of first term	
Members appointed by th	e Minister (Statute par 15(1)(g); Act s	27(4)(c))	
Mr KD Dlamini (Chairperson)	Standing Committee HR Committee Investment Committee	2012	
Ms N Lesela	Institutional Forum (Chairperson) Standing Committee	2012	
Mr M Madi	Audit, IT and Risk Committee	2020	
Ms V Qinga	Standing Committee	2013	
Mr TS Tsengiwe	HR Committee	2020	
Members elected by the	Convocation (Statute par 15(1)(e), par	48(2))	
Dr HH Köster (President of the Convocation)		2021	
Mr DJ Fourie	Audit, IT and Risk Committee	2021	
Ms CM Read	Audit, IT and Risk Committee	2021	
Dr RJ van Eyden	Investment Committee	2021	
Members elect	ed by Senate (Statute par 15(1)(c))		
Prof AJ Antonites		2020	
Prof BTJ Maharaj (until 25 October 2021 when he was appointed as Acting Vice- Principal: Research, Innovation and Postgraduate Education)	Standing Committee	2018	
Prof MC Oosthuizen (term commenced 11 November 2022)		2022	
Prof I Pikirayi	Institutional Forum	2011	
Members elected	d by the Donors (Statute par 15(1)(j))	r	
Mr BJ Kruger (Deputy Chairperson)	Standing Committee (Chairperson) Audit, IT and Risk Committee HR Committee	2020	
Mr JHP van der Merwe	Investment Committee (Chairperson)	2018	
Members appointed by Council based on expertise/experience (Statute par 15(1)(d))			
Adv A Chowan	HR Committee	2021	

Table 1.1	Composition o	f Council, 20	122 (in terms	of the 201	8 Statute)
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Ms P Langeni	Investment Committee	2021		
Ms MMT Ramano	Audit, IT and Risk Committee (Chairperson)	2021		
Mr FD Swart	HR Committee Investment Committee	2019		
Mr AE Swiegers	Audit, IT and Risk Committee	2020		
Ms S Taylor	HR Committee (Chairperson)	2019		
Members appointed by the Tshwane local authority (Statute par 15(1)(h))				
Mr PA Nel ²		2019		
Student members appointed by the ele	cted SRC on an annual basis (Statute p	ar 15(1)(f), par 17(3))		
Ms T Mashila				
Mr T Lalla				
Employee member (academic) e	lected by academic employees (Statut	e par 15(1)(j))		
Prof V Reddy		2018		
Employee member (non-academic) e	lected by non-academic employees (St	atute par 15(1)(k))		
Ms LJ Mnguni		2018		
Ex officio men	bers (Statute par 15(1)(a) and (b))			
Prof T Kupe				
(Vice-Chancellor and Principal)				
Prof NTF Duncan				
(Vice-Principal until his retirement on 31 August 2022)				
August 2022)				
August 2022) Prof LA Feris (from 1 July 2022)				
August 2022) Prof LA Feris (from 1 July 2022) Prof NT Mosia				
August 2022) Prof LA Feris (from 1 July 2022) Prof NT Mosia (Vice-Principal)				

During 2022, the office bearers of Council were the following:

 $^{^2}$ Mr PA Nel sadly passed away in April 2022. The position was vacant for the remainder of 2022.

- Chairperson: Mr KD Dlamini
- Deputy Chairperson: Mr BJ Kruger
- Secretary: Prof CMA Nicholson

Table 1.2 below reflects a summary of attendance by members at Council meetings in 2022.

Meeting	Present (of 30 members)	Absent with apology	Vacant seats
16 March 2022	23	5	2
23 June 2022	21	6	3
25 July 2022 (special)	23	4	3
16 September 2022 (special)	17	0	3
24 November 2022	23	5	2

Table 1.2 Summary of attendance of Council meetings by members, 2022

2. REPORTS AND STATEMENTS OF COUNCIL AND COMMITTEES OF COUNCIL

2.1 Report by the Chairperson of Council

This report by the Chairperson of Council, centres on Council's statutory role of governing the University as required by the Higher Education Act 101 of 1997 (as amended) and the Statute of the University of Pretoria. Accordingly, the report focuses on governance structures and processes, financial oversight and significant matters considered by Council during the course of 2022. This report should be read in conjunction with the Council statements, which follow in Sections 2.2 - 2.8 and contain full details of the Council Committees and their activities.

2.1.1 Connected and collaborative

Out of adversity comes opportunity may well epitomise 2022. While in no way minimising the devastation and upheaval of the past three years, the opportunity to be uncharacteristically flexible and responsive has taught UP a number of lessons, which are helping us to shape a successful future.

One of the most obvious silver linings has been the fast-forwarding of the use of technology, resulting in innovative ways of meeting, communicating, teaching, and learning. Given the enriched learning experience and flexibility presented through the online format, it is unlikely that the University will ever return to contact-only teaching and learning, and we certainly have a very interesting hybrid opportunity to take into the post-pandemic world.

Of course, the implementation of 4IR and Society 5.0 systems requires the technological leap from 4G to 5G and beyond. As a university we need to keep pace with this and be innovators of technology, making full use of extended and virtual reality, and other disruptive technology skills. Equally important in this equation are generic skills, such as adaptive thinking, strong people management, negotiation and decision-making skills, cross-cultural competencies, computational thinking, new media literacy, and virtual collaboration.

International collaboration enables universities to make significant research and innovation leaps by sharing and building on each other's areas of expertise. It also elevates all of our teaching and learning, and research facilities to a new level. In 2022, UP continued to develop partnerships with prominent institutions and networks across the world, thanks in part to a robust IT infrastructure and fast-tracked digital expertise.

The University collaborates with over 3 000 institutions across the globe and has some 230 international institution-wide partnerships across 70 countries and six continents. In 2022, UP signed 27 agreements with its partners globally, which included renewals. Of the new agreements, 16 are with European partners, four in Africa, one in Asia/Pacific, and four in North America. More information regarding the University's international partnerships is provided in Section 3.4.4.1 of the Report of Senate to Council.

2.1.2 Ethical leadership and corporate citizenship

Council acts as the custodian of governance and oversight in the institution through the activities of a number of Council Committees (further details on the Committees of Council are provided in

Section 2.3). Council statements on governance in general and on matters of specific importance for good governance, sustainability and integrated reporting appear in Sections 2.2 - 2.8 and contain details and relevant information on Council's governance structures and processes, and the enabling and supportive institutional policies, practices and procedures.

Council has the ultimate responsibility to ensure that the University's ethical values and principles are effectively implemented through the introduction and implementation of appropriate, approved ethical codes for Council members, staff and students. The Code of Conduct for Members of Council was reviewed, amended and approved by Council in 2017 and was again reviewed in 2021 and approved by Council at its meeting of 24 June 2021.

The Code identifies the underlying values and sets out the standards guiding the conduct of Council members. It contains extensive provisions regulating possible conflicts of interest, including an annual declaration of interests by all members of Council. To ensure transparency and avoid potential conflicts of interest, a Register of Interests is circulated at the start of every Council meeting. The ethical codes for staff and students and related policies and practices are dealt with in Section 2.8.

Council assesses its performance in carrying out its responsibilities annually in accordance with a formally approved process. The assessment includes an evaluation by Council members of the functioning of Council in terms of its responsibilities, meetings of Council, membership of Council, the relationship between Council and the Vice-Chancellor and Principal as the chief executive and accounting officer of the University, the performance of Council in general, and the performance of the permanent Committees of Council. The Standing Committee of Council (which is the executive committee of the Council) considers the outcome of the assessment and makes recommendations to Council in this regard. The results of the assessment in 2022 of the 2021 performance again reflected that Council and its committees were perceived as performing at a level of good to excellent. The full report and the assessment forms are available to Council members at the Office of the Registrar.

An annual report on Council performance, approved by Council, is also submitted to the DHET on an annual basis.

2.1.3 Compliance with laws, codes, rules and standards

The University upholds the core values of integrity, fairness, accountability and transparency in all its interactions with students, alumni, business partners, the government, employees or other stakeholders. As such, the University regards compliance with legal, regulatory, ethical and internal policies and DHET's policies applicable to the University as a business imperative and, accordingly, views non-compliance in a serious light.

The University Council is accountable for ensuring that the University complies with relevant legal, regulatory, ethical and internal policy obligations applicable to the University, and that compliance risks are appropriately managed. It has delegated the oversight thereof to the Audit, IT and Risk Committee of Council (the Committee's report is presented in Section 6).

The University has a number of policies aimed at ensuring institutional compliance, including the Whistle-blowing and Anti-Fraud Policy and Response Plan, as well as the Institutional Compliance

Policy, which are updated on a regular basis. In addition, the UP Ethics Hotline, established in 2011, continues to be administered by an independent consulting firm.

Upon receipt of complaints from whistle-blowers, preliminary inquiries are held and, where warranted, full investigations are conducted. Where instances of irregular, unlawful, unethical conduct, contraventions of legislation, non-compliance with the University's Code of Conduct or other policies are found, the University takes disciplinary steps and/or initiates civil or criminal legal processes, as considered appropriate.

In total, 93 whistle-blowing and fraud cases were reported from 1 January 2022 to 31 December 2022. All cases reported were dealt with in accordance with the Whistle-blowing and Anti-Fraud Policy of the University.

In summary, out of the cases reported during 2022, allegations were found to be unsubstantiated in 23% of the cases and confirmed/partially confirmed in 33% of the cases. In 19% of the cases, the allegations were withdrawn, found to be unrelated to UP or could not be investigated due to insufficient information provided by the whistle-blowers. The investigation of the remainder of the cases (25%) is still in progress.

Of the total 93 reported cases, 33% related to alleged fraud, 22% related to alleged non-compliance with policies, 19% related to alleged misconduct by employees and students, 13% related to alleged cybersecurity risks and data concerns, while 9% of the cases related to alleged criminal offences. The remaining cases (4%) related to miscellaneous issues.

2.1.4 Funding and financial oversight

A comprehensive planning, budgeting and policy framework, supported by operational procedures, regulations and financial directives, is in place. This ensures that the University's financial position is managed effectively within the broader national framework of subsidy allocation and student enrolment growth. In addition, Council has established formal policies and frameworks for the design and implementation of the system of internal financial controls and regular reviews of the internal financial controls are conducted. Council is satisfied that the University's internal financial controls are effective.

The South African higher education sector continued to deal with the challenge of declining state funding, increasing regulation of tuition fees, rising student debt and challenges related to the National Student Financial Aid Scheme (NSFAS). As one of the largest contact universities nationally, these challenges had significant implications for UP's functioning and its long-term sustainability. Taking a proactive approach to managing the risks, the University delayed non-essential capital projects and employed strict processes for the appointment of staff. These austerity measures were accompanied by targets relating to third-stream income and external funding.

On a positive note, fundraising exceeded the 2022 target of R170 million, resulting in a total of R250 million being raised. In addition to funding secured by means of formal research activities and fundraising efforts, Enterprises University of Pretoria Proprietary Limited (Enterprises UP) played a significant role in generating alternative sources of funding. The company develops, implements and manages the business activities of the University, such as continuing education, consulting and contract research. Driven by the motto "Shifting knowledge to insight", the company successfully

expanded its footprint in South Africa and globally, resulting in a total turnover of R235,5 million in 2022.

Overall, the University maintained its good track record of financial stability in 2022 despite the challenging economic environment. Although many factors influence operational and financial sustainability, two key ratios are monitored carefully at UP, namely the solvency and liquidity ratios. As at 31 December 2022, both these ratios were sufficiently healthy to conclude that UP is in an operationally sustainable position. Further detail and comprehensive financial information are contained in Part C (Financial Review).

2.1.5 Remuneration of Council members

In 2010, Council approved the principles governing the remuneration of Council members based on a recommendation by the Human Resources Committee of Council. In addition to airfare and accommodation costs, a fixed honorarium per meeting attended is paid to external members of Council. The amount of the honoraria is adjusted annually by the year-on-year CPI inflation rate as at the end of December of the previous year, and the total annual amount payable to an individual member is based on the number of meetings of Council and Council Committees attended, but is capped at a fixed maximum, which is also adjusted annually by the year-on-year CPI inflation rate. In March 2022, Council decided that, given the financial constraints that the University was facing, there would be no increase in the honorarium paid to external Council members in 2022. External Council members were also encouraged to contribute their honorarium to the Tuks Scholarship Fund.

The honorarium payable to Council members per meeting in 2022 is shown in Table 2.1.

	Honorarium payable per meeting	2022 cap on total honoraria payable	
Chairperson of Council	R6 278.00 (also receives an annual cell-phone allowance of R6 329.00)		
Chairperson of Council Committees	R6 278.00	R111 996.00	
Member of Council or Council Committee	R4 362.00		

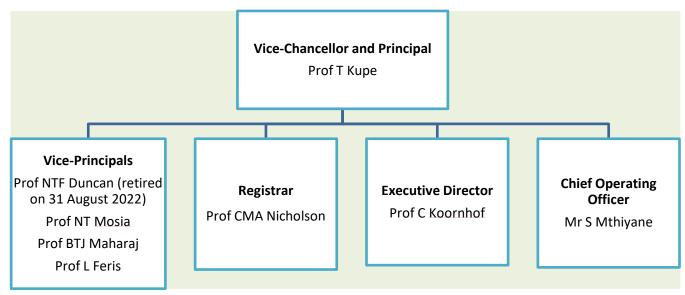
Table 2.1 Honorarium payable to Council members per meeting, 2022

2.1.6 Significant matters considered by Council

2.1.6.1 Executive appointments

Prof L Feris was appointed as Vice-Principal: Academic with effect from 1 July 2022. Prof BTJ Maharaj was appointed as Vice-Principal: Research, Innovation and Postgraduate Education with effect from 1 August 2022. The University Executive was composed as shown below.

Figure 2.1 Composition of UP Executive, 2022



2.1.6.2 Notable achievements and developments

At each meeting, the Council and the Standing Committee of Council consider detailed reports from the Vice-Chancellor and Principal highlighting developments in the higher education sector, and providing an overview of notable achievements of the University, its staff and students, and of challenges to be addressed. This report includes examples to illustrate recognition of achievements and developments in 2022, with further information provided in Sections 3.3 and 3.4, and in the Vice-Chancellor's report in Section 7.

Select academic and other achievements

- → Dr Mia Wege, a scientist and lecturer in the Department of Zoology and Entomology at the Faculty of Natural and Agricultural Sciences, was part of an international research team that made the ground-breaking discovery of the world's largest fish breeding colony in the Weddell Sea off the coast of Antarctica;
- → Prof Marietjie Venter, Head of the Zoonotic Arbo- and Respiratory Virus Programme at the Centre for Viral Zoonoses in the Department of Medical Virology, was selected by the World Health Organisation (WHO) to chair the prestigious Scientific Advisory Group for the Origins of Novel Pathogens (SAGO);
- → Prof Nigel Bennett, in the Department of Zoology and Entomology, was awarded the prestigious JFW Herschel Medal by the Royal Society of South Africa. The JW Herschel medal is the Society's highest honour and has been sparingly given over the years. The award reflects an outstanding career in mammalogy, physiology and social evolution, as well as the significant contributions to these fields;
- → Prof Tinyiko Maluleke was appointed as Vice-Chancellor and Principal of Tshwane University of Technology with effect from 1 February 2022. Until his appointment, Prof Maluleke was a senior research fellow and the deputy director of the Centre for the Advancement of Scholarship (CAS); and

→ Prof Jerry Pillay, Dean of the Faculty of Theology and Religion, was elected general secretary of the global faith-based organisation, the World Council of Churches (WCC). The WCC is a fellowship of churches consisting of more than 354 denominations.

Other high-profile achievements and awards are presented in Section 3.4 and Section 7.

Student achievements and impact

Students' achievements are reflected in the numerous awards received during the year, some of which are listed here (see also the Vice-Chancellor's report in Section 7):

- → A team of six students from the Faculty of Law came third at the 29th annual International Commercial Arbitration Moot Court Competition; and
- → A group of students from the UP Plasma Research Unit scored a second-place finish during the International Conference on Sustainable Development 2022, aimed at finding multidisciplinary solutions to climate-related problems.

UP provides a broad range of opportunities and support to undergraduate and postgraduate students to create an environment that supports the successful completion of their studies, and access to facilities and activities that will enable them to identify and develop their talents outside the classroom environment, and to become well-rounded, engaged, and productive members of society (also refer to Sections 3.3 and 3.4, and the Vice-Chancellor's report in Section 7).

Advancement, partnerships and engagement

Contributing to the development and well-being of people and societies is a critical element of UP's public mission and a commitment that permeates its engagement at several levels. Section 7.5 in the Vice-Chancellor's report details the University's major collaborations and advancement initiatives in 2022. See also Section 7.10.1 on fundraising and donations.

Working with industry

Strong links with industry is one of UP's key strengths. The University has a track record of successful collaboration with industry across various domains, amongst them, research chairs, industrial placement opportunities for our students, infrastructure development, and continuing professional development. Examples (see also Section 3.4.4 of the Senate Report) of some of the notable partnerships in 2022 include:

- → A project on development of multivalent whole-cell inactivated vaccines, surveillance tools and a deployable vaccine system funded by the Technology and Human Resources for Industry Programme (THRIP) involving Iraka Biotech as the industry partner;
- → A consortium project in the Long-term Europe Africa Partnership on Renewable Energy (LEAP-RE) programme that is part of Horizon Europe. The aim of the project is the exploitation of hydrogen gas that is emitted naturally in certain geological provinces, and to assess its use for standalone power generation; and

→ A project funded by Klein Karoo Seed Production on understanding honey bee foraging behaviour during the flowering period of onion.

2.1.6.3 Campus development, facilities and major capital works

The University is committed to providing staff and students with an environment that is conducive to social cohesion and achieving success in the core functions and activities of the institution. To this end, the Campus Spatial Development Plan was developed during 2019 and submitted to Council for approval in November 2019. The plan serves as the blueprint for the development and maintenance of infrastructure to support the future growth of UP. An updated version has subsequently been developed and will serve at the University Council in June 2023 for approval.

All capital investments in infrastructure were approved in accordance with the Higher Education Act. Approvals were in accordance with the standing financial delegations at either the level of the University Council, the Standing Committee of Council, or the Executive. The Tender Committee for large tenders is chaired by the member of the Executive responsible for infrastructure and further consists of members of the Facilities Advisory Committee. Almost all infrastructure contracts are managed by internal project managers employed in the Department of Facilities Management. A few large projects are managed by external project managers. The standard Joint Building Contracts Committee (JBCC) contract is used for all major building projects.

Some of the highlights in 2022 include:

- → The PACRI/One Health Building at the Prinshof Campus was refurbished and extended;
- → The Tirisano residence refurbishment project on the Groenkloof Campus was completed;
- → The Varsity Lodge residence refurbishment at the Hatfield Campus was completed;
- → The Postgraduate Support Hub in the Graduate Centre on the Hatfield Campus was completed;
- → Back-up water facilities at women's residences (Asterhof, Vergeet-my-nie and House Erica) were completed;
- → A project to create student meeting spaces in the Student Centre on Hatfield Campus was concluded;
- \rightarrow The TuksHockey Astro on the Hillcrest Sports Campus was replaced;
- → The Groenkloof Technika Building refurbishment project was concluded, allowing the printers and binders to be moved from the South Campus to the Groenkloof Campus;
- → The VISUP Centre was completed in the Groenkloof Technika Building;
- → The Groenkloof Dining Hall refurbishment was completed; and
- → The project for the refurbishment of the Law Building (Phase 3, including the Moot Court) was completed on the Hatfield Campus.

2.1.7 Concluding comment

The University Council is satisfied that UP was managed in accordance with the goals and strategies outlined in the 2022 Implementation Plan, the UP 2025 Strategic Plan, the requirements for good governance as set out in the King IV Report on Corporate Governance for South Africa, and all laws, rules and codes applicable to the University.

In 2022 we entered the third and final phase of UP 2025, and relentlessly pursued the lofty goals which have been set out in our 15-year long-term strategy. This strategy has served as a blueprint

for the University's role as a national asset, and has guided our responses to national, regional, continental and global challenges and priorities.

The Council extends its gratitude to the Vice-Chancellor and Principal and his leadership team who kept a firm hand on the tiller in steering the University through another uncertain year. Thanks to them, the University has demonstrated its impact both at home and abroad.

Mr KD Dlamini Chairperson of Council

2023

Date

2.2 Council's Statement on Governance

Council is the governing body of the University of Pretoria as provided for by the Statute of the University of Pretoria and approved by the Minister of Higher Education, Science and Innovation and published in Government Gazette No 42127 of 21 December 2018. Council governs the University subject to the provisions of the Higher Education Act, 101 of 1997 (as amended) and the Statute. Council is responsible for governance, policy-making and monitoring, and for formulating guidelines relating to strategic and financial governance (including performance evaluation and risk assessment). In addition, it is responsible for providing guidelines for staff matters, fostering a positive academic atmosphere, addressing disciplinary matters regarding staff and students as well as the admission and language policies of the University.

The University is committed to quality, relevance, diversity and sustainability in its academic mission, and pursues the values of discipline, transparency, independence, accountability, responsibility, fairness and social responsibility, as advocated in the King Reports. Accordingly, after considering the differences between the business sector and higher education, Council took cognisance of, and applied where appropriate, the Code of Corporate Practices and Conduct and the Code of Ethical Behaviour and Practice, as outlined in the King Reports in the period under review. In supporting these codes, Council recognises the need to conduct the business of the University with integrity and in accordance with generally accepted practices. The monitoring of the University's compliance with the Code forms part of the mandate of the Audit, IT and Risk Committee of Council. As explained in the Chairperson's report, Council has established a process in terms of which it can assess its performance annually as the governing body of the University. A similar process has been established for the self-assessment of Council Committees.

The Standing Committee of Council, the Audit, IT and Risk Committee of Council, the Human Resources Committee of Council, and the Investment Committee of Council were established in terms of section 29 of the Higher Education Act. The comprehensive review of the University's Statute, which commenced in 2020, was concluded in 2022 with the Statute being approved by the Minister and published on 9 December 2022 in Government Gazette No 47665. Given the changes to the Statute, the Charters of the various Council Committees, the Code of Conduct for Council members, and a number of other regulations and policies will be reviewed in 2023.

The minutes of meetings of the Standing Committee of Council and the Audit, IT and Risk Committee, and reports on the activities of the Human Resources Committee and the Investment Committee were tabled at Council meetings.

Council may delegate the authority, but not its responsibilities, to manage the institution effectively to the Vice-Chancellor and Principal. In accordance with the Statute, Council delegates to the Vice-Chancellor and Principal all the powers necessary to perform his duties. The Principal may, in turn, delegate duties to other employees or committees, except where such further delegation is expressly excluded. Council delegations were reviewed and approved by Council during 2021.

2.3 Council Committees

In accordance with section 29 of the Higher Education Act, Council has established four committees. These committees are formally constituted with charters and are comprised mainly or exclusively of external Council members. In addition, Council has a Joint Committee that meets on an *ad hoc* basis to consider and formulate recommendations to Council on the appointment of the Vice-Chancellor and Principal and Vice-Principals. On 24 June 2021, Council reconstituted all its committees and elected chairpersons for each committee for a period of two years. The committees will again be reconstituted in June 2023 in accordance with the amended Statute of the University.

Council committees are chaired by individuals with appropriate skills and experience. Council was informed of the activities of all Council Committees at each of its ordinary meetings. All significant matters on the agendas of these committees affecting the University served before Council.

In view of a number of developments impacting on the functioning of governing bodies and hence also on the assessment of their performance, such as the publication of the King IV Report, guidelines for remuneration committees published by the Institute of Directors in South Africa, and the amendments to the reporting regulations for public higher education institutions, the process, documentation and forms related to the assessment of Council and the various Council Committees were reviewed in 2014 to ensure continued compliance with the applicable regulatory framework and best practice. The assessment forms were amended in 2018 to include aspects of the Guidelines for Good Governance Practice and Governance Indicators for Councils of South African Public Higher Education Institutions and the accompanying Governance Indicators Scorecard published by the Department of Higher Education and Training (DHET). The responses in the annual Council performance assessment forms were used to populate the Scorecard and the Scorecard was approved by Council in June 2022 for submission to the DHET. The results of the 2022 assessment indicated that Council and its committees were perceived as performing at a level of good to excellent. In line with the Guidelines for Good Governance Practice, an external review of Council was undertaken in 2022 with Council to consider the outcome of the review and any forthcoming recommendations during 2023.

More information on Council committees is provided below.

2.3.1 The Standing Committee of Council

In 2022, the Standing Committee of Council was constituted in terms of paragraph 20(1) of Chapter 5 of the Statute (2018) of the University of Pretoria. The Standing Committee of Council serves as the Executive Committee of Council and has therefore been renamed as such in the amended Statute (2022). The Standing Committee considers proposals and objectives for the University to be approved by Council for implementation by the University management on, *inter alia*:

- → Strategic governance;
- → Financial control, in consultation with the Audit, IT and Risk Committee of Council;
- → Fostering a positive academic atmosphere; and
- → Social and ethics matters pertaining to the University as a whole, in consultation with the Human Resources Committee of Council.

The Standing Committee of Council also operates as the Council Membership Committee by considering nominations for vacancies on Council and making recommendations in this regard to Council. The Committee comprised seven members, namely the Chairperson and Deputy Chairperson of Council (*ex officio*), the Vice-Chancellor and Principal (*ex officio*), two members of Council who are permanent employees of the University and members of Senate, and two additional Council members who are appointed from amongst the external members of Council.

The Committee had three meetings in 2022.

Meeting	Committee members present (of 7 members)	Absent with apology	Vacant seats
22 February 2022	7	0	0
2 June 2022	5	2	0
7 November 2022	5	1	1

Table 2.2 Attendance: Standing Committee of Council (SCC)

2.3.2 The Human Resources Committee of Council

In 2022, the Human Resources Committee of Council was constituted in terms of paragraph 23(1) of Chapter 5 of the Statute (2018) of the University of Pretoria. Council has delegated to the Human Resources Committee, which also operates as the Remuneration Committee of Council, the power to finalise, *inter alia*, the following matters on its behalf:

- → Approving regulations and policies for the appointment of academic and non-academic employees of the University;
- → Appointing certain employees of the University in terms of the regulations and policies of the University, except as otherwise provided for;
- → Determining the general conditions of service, annual salary adjustments, disciplinary provisions and benefits of employees as well as approving codes of conduct and regulations applicable to employees;
- → Ensuring that the appointment of employees, conditions of service and all other activities pertaining to employees conform to all relevant legislative provisions;
- → Approving the remuneration of the Vice-Chancellor and Principal, the Executive management and other senior employees; and
- \rightarrow Monitoring the implementation of the University's Employment Equity (EE) Plan.

In terms of the Charter of the Committee, the Committee should consist of at least five members, all of whom are external Council members, including the Chairperson of Council and the Chairperson of the Standing Committee of Council. The Vice-Chancellor and Principal attends the meetings by standing invitation.

The Committee held three meetings during 2022. The Chairperson of the Committee reports to Council on the activities of the Committee on a regular basis.

Meeting	Committee members present (of 6 members)	Absent with apology	Vacant seats
28 February 2022	5	1	0
10 June 2022	6	0	0
17 October 2022	5	1	0

Table 2.3 Attendance: Human Resources Committee of Council (HRCC)

2.3.3 The Joint Committee of Council

The Joint Committee of Council, which consists of all members of the Standing Committee of Council and all members of the Human Resources Committee of Council who are not members of the Standing Committee of Council, deals with the appointment of the Vice-Chancellor and Principal and Vice-Principals. The Committee is chaired by the Chairperson of the Standing Committee of Council and meets on an *ad hoc* basis.

The Committee met four times during 2022. In March 2022, the Committee considered the applications received for the position of Vice-Principal: Academic. In May 2022, the Committee conducted interviews with the shortlisted candidates for the abovementioned position and made a recommendation to Council in this regard. In June 2022, the Committee considered the applications received for the position of Vice-Principal: Research, Innovation and Postgraduate Education. In July 2022, the Committee conducted interviews with the shortlisted candidates for the aforementioned position and made a recommendation to Council in this regard.

Meeting	Committee members present (of 11 members and 10 members from July 2022)	Absent with apology	Vacant seats
16 March 2022	7	4	0
31 May 2022	7	4	0
10 June 2022	9	1	1
4 July 2022	8	1	1

Table 2.4 Attendance: Joint Committee of Council (JCC)

2.3.4 The Audit, Information Technology and Risk Committee of Council

Please refer to the separate report of the Committee, which appears in Section 6.

2.3.5 The Investment Committee of Council

In 2022, the Investment Committee of Council was constituted in terms of paragraph 23(1) of Chapter 5 of the Statute (2018) of the University of Pretoria.

The Investment Committee of Council is charged with overseeing the investment matters of the University. The Committee convenes biannually during May/June and October/November to consider the performance of the University's investment portfolio for the preceding six-month period, ending 31 March and 30 September, respectively. The Committee comprises external Council members, the Vice-Chancellor and Principal *(ex officio),* members of the Executive nominated by the

Vice-Chancellor and Principal, the Executive Director: Finance, the Director: Finance, and at least one knowledgeable full-time permanent employee of the University from the academic staff appointed by the Vice-Chancellor and Principal. The Committee held two ordinary meetings during 2022 and reports on the activities of the Committee were tabled at Council meetings for noting.

Meeting	Committee members present (of 12 members)	Absent with apology	Vacant seats
16 May 2022	10	2	0
9 November 2022	10	2	0

Table 2.5 Attendance: Investment Committee of Council

2.4 Statement on Sustainability

The University of Pretoria is cognisant of the important role that it plays in sustainable development, and its contribution to the protection and strengthening of systems in the complex and interconnected domains of nature and society. Furthermore, we are mindful that such contributions need to be step changes, moving beyond incremental progress over time.

The need for transformational change is particularly relevant in the South African context, with its pressing challenges of poverty, inequality and unemployment. Over the past year, these have not been ameliorated, and indeed continue to be brought more sharply into focus with economic uncertainty, political instability, breakdowns in social cohesion, and the ongoing COVID-19 pandemic.

We see our contribution to sustainability as twofold. Firstly, through the way we function and conduct ourselves as an institution, as we interact with a range of stakeholders, create the conditions for people within the University community to thrive, demonstrate stewardship over the natural resources under our care, and contribute to the cohesion and upliftment of our host communities. We refer to this as operational sustainability. Secondly, in fulfilling our purpose as a higher education institution, we contribute more broadly to sustainability through our work in the core functions of teaching, learning, research and community engagement. The capability we build through the education of undergraduate and postgraduate students, and the new knowledge we create from research, both contribute to meeting societal needs for a just and inclusive society, and the protection of our planet for future generations. In realising our contributions within these themes, it is essential for us to ensure financial sustainability for the future viability of the institution.

Flowing from this wide-angle view of sustainability, we have mapped our work to South Africa's National Development Plan (NDP), the African Union Agenda 2063, and the United Nation's Sustainable Development Goals (SDGs), demonstrating alignment with, and contribution to their underlying principles and intent. The alignment of our efforts to societal needs and aspirations has served as a starting point to achieving the required step change in our contributions to a better country, continent, and world. Subsequently, we have integrated sustainability into our *University of Pretoria Strategic Plan: Destination 2026 and Beyond*. Intentionally hardwiring sustainability into the institutional strategy has served to mainstream sustainability thinking and practice, ensured coherence of activities, and leveraged efforts across all facets of the University, thus amplifying our impact.

In this statement we reflect on our strategic approach to sustainable development, perspectives of UP's financial and operational sustainability, influencing broader sustainability impacts through our core functions, and our work in relation to the SDGs. As part of our integrated approach, the principles of inclusivity, innovation, fairness and collaboration are firmly embedded into the strategy, and cut across all aspects of the report.

2.4.1 Our strategic approach to sustainable development

Development and subsequent Council approval of the UP 5-year strategy, *Destination 2026 and Beyond*, was concluded at the end of 2021, with its official launch at the beginning of 2022. The design process drew inputs from stakeholder groups across the University community, including academic, professional and support staff, as well as the student body. Key sustainability philosophies and principles were embedded into the strategy, and as the strategy is cascaded through the University, these are given expression through both core and support functions.

2.4.1.1 Integrating sustainability into the institutional strategy

At the heart of our institutional strategy is reimagining the role and mission of UP as a societal agent for the public good, where we exist because of society and function for the good of society. This is inherently a sustainable development conversation, with our sustainability as an institution, and our contributions to the sustainability of society, being inextricably linked.

In reimagining UP as an integral part of society, and with a raft of mutually interdependent relationships, we seek to be sustainable as an entity, and at the same time are compelled to be influential and contribute to the positive shaping of society. This philosophy has been incorporated into the institutional strategy at multiple levels, including our vision, institutional goals and strategic focus areas, and is translated into action through:

- \rightarrow Leadership, which sets the tone and shapes the institutional culture;
- → Institutional and curricular transformation to meet current and future societal needs;
- → Innovative models of research, education and engagement;
- → Broadened access to higher education, with enhanced student support in their journey through the University, and across the student lifecycle;
- → Advancing a transdisciplinary agenda with accelerated and expanded collaboration and partnering to amplify our impact; and
- → A capable, technology-enabled, responsive, and financially sustainable institution.

Collectively, and in an integrated way, we build the capability of individuals and the broader institution to navigate complexity, for sustainable outcomes and impacts for the public good. These include demonstrated quality and excellence; capability building through the strengthening of human capital; developing innovative solutions to complex challenges; influencing the shaping and development of enabling policy frameworks; focusing on societal development where nobody is left behind; and being committed to planetary protection and renewal.

Through this integration, our institutional strategy is consistent with the five pillars of the SDGs – people, planet, prosperity, peace, and partnerships – and with the critical success factors of Agenda 2063. It serves as a sustainability framework for intentional and coherent action towards our institutional sustainability, and that of society. In doing so, a parallel or complimentary sustainability

strategy is unnecessary and redundant.

During the year under review, *Destination 2026 and Beyond* functioned as a living strategy. It was cascaded and translated through all faculties and departments, enabling the development of functionally relevant activities. At the same time, learnings from translation at faculty and departmental levels helped to clarify and strengthen aspects of the institutional strategy, particularly around mechanisms to improve understanding and implementation. Through this two-way process, a critical enhancement during the year was the development of "pathways to impact" for each institutional goal. In this novel approach, linkages and dependencies between strategic focus areas were defined and mapped into critical pathways to enable goal achievement, for greater understanding and coherence, and accelerated implementation.

2.4.1.2 Stakeholder engagement

As an integral part of society and an institution for the public good, we recognise the importance of our stakeholders and the need to engage with them meaningfully in areas of shared interest. Our stakeholder engagement philosophy spans both internal and external stakeholders, and is characterised by recognising, respecting, and valuing all stakeholders for their embedded talents and capabilities, and embracing a two-way relationship of mutual benefit.

Determining who our stakeholders are is underpinned by the potential impact related to our institutional activities, or to specific issues of shared interest. Potential impact is viewed from dual perspectives – how our actions impact on stakeholders, and how stakeholder actions impact on the institution. Beyond impact, stakeholder engagement is intimately linked to partnering and collaboration. Both are critical components of our institutional strategy, and are at the core of SDG 17, which serves as an enabler to accelerate progress across the other 16 SDGs.

Internal stakeholders comprise the entire University community, consisting of academic, professional and support staff, and the student body. Formal governance and engagement structures across the University hierarchy involve all internal constituencies, are well established, and continue to function well. These are discussed in detail in other sections of the Reports and Statements of Council and Committees of Council, and particularly in the statements on Transformation (Section 2.5), Conflict Management (Section 2.6), and Worker and Student Participation (Section 2.7). Beyond formal structures and processes for engagement, a range of initiatives are under way to strengthen an inclusive and engaged culture that embraces diversity, collaboration and innovation. Such an enabling culture calls for high levels of trust, and is essential to mobilising the array of talents within the University community for a sustainable future.

During 2022, we began a detailed review of the UP Transformation Strategy, which has a dedicated focus on creating safe spaces for dialogue and strengthening the institutional culture. Approval of the revised strategy is scheduled for 2023. Beyond the institutional transformation strategy, and affirming the importance of culture in enabling engagement within the University community, an Institutional Culture Survey was concluded in 2022, to evaluate progress from the first institutional culture survey undertaken some 10 years ago. All faculties and professional service departments reviewed outcomes of the survey that were relevant to their areas of accountability, and have incorporated initiatives to address weaknesses as part of their annual plans. Another example of the institution's approach to strengthening a culture of engagement for mutual benefit, is our continued effort to advance transdisciplinarity in teaching, learning and research. This involves both internal

and external stakeholders. From an internal stakeholder perspective, there is increasing collaboration between different faculties around defined complex challenges, and using the platforms created in the University such as Future Africa, the Javett-UP Art Centre and Innovation Africa @UP.

External stakeholders represent far greater disparity across and within different stakeholder categories. To address this heterogeneity in mapping our stakeholders, we have an initiative-led approach that considers the nature and complexity of initiatives, and enables more targeted and fit-for-purpose stakeholder engagement. The initiative or complex challenge being addressed determines the requisite mix of voices and stakeholders around the table. Depending on the issues at hand, stakeholders could include those from academia, civil society, government, industry, and any mix of these categories. Initiatives are also mapped according to their geographic footprint, which may be local, national, continental and global.

As part of our strategic intent, stakeholder engagement is ubiquitous to what we do. We continually undertake a wide array of engagements across stakeholder categories, and at local, national, continental and global levels. Engagement and collaborations range from those at individual researcher levels, through unit, faculty and institutional-level collaborations. Institutional collaboration is largely through multi-university networks covering an expansive African footprint, and an equivalent global reach. Networks include the African Research Universities Alliance (ARUA), the Association of Commonwealth Universities (ACU), the Australia-Africa Universities Network (AAUN), the Regional Universities Forum for Capacity building in Agriculture (RUFORUM), the Alliance for African Partnerships – Michigan State University (AAP), and the University Social Responsibility Network (USRN). In certain networks, UP plays a leadership role such as hosting the ARUA Centre of Excellence on Sustainable Food Systems, and representation on the ACU Council by our Vice-Chancellor, who is also Co-chair and African Chair of the Steering Group that provides guidance and oversight to the AAUN.

The chart below presents the global distribution of our 202 active international partners in 2022. Partners are made up of universities or entities in the higher education sector with whom we share Memoranda of Intent, Institutional Agreements or Faculty Agreements.

Through our African Global University Project (AGUP), work is underway to identify potential core strategic partners, as well as to optimise balance in the geographic distribution of our partner footprint.

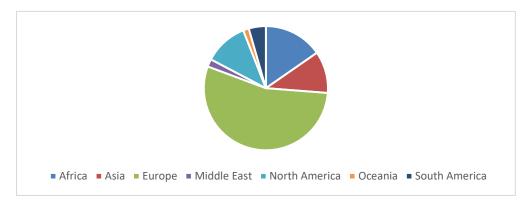


Figure 2.2 Active international partners, 2022

Community Engagement (CE) represents a special form of stakeholder engagement. It recognises that we are embedded in our host communities, and affirms the importance of communities and civil society. Our approach to CE is framed by an Institutional Policy on Community Engagement that guides and shapes our CE programmes and their integration into core and support functions. Institutional CE is discussed in more detail in the section on UP as an anchor institution (Section 2.4.3.4). Curricular CE is addressed in Section 3.3.1 in the Senate Report to Council.

2.4.2 Financial sustainability

Financial sustainability in the face of significant economic headwinds is essential for our continued effectiveness and functioning as a going concern that strives for positive societal impact. The overall financial sustainability of UP is addressed in detail in the Financial Review (Section 9) of the Annual Report. In this section, our focus is limited to the generation of alternative (third-stream) funding streams.

2.4.2.1 External research funding

In our quest to become a leading research-intensive university, securing and growing alternative sources of funding has become increasingly important in the face of economic instability and a declining state subsidy. Diversification of revenue and funding sources is not only critical to achieving our strategic intent and ensuring our sustainability and resilience as an institution; it also reflects our success in positioning ourselves as a leading institution with a global outlook.

A significant portion of third-stream revenue is from external research funding. Government-related grants from agencies such as the National Research Foundation (NRF), the Medical Research Council (MRC), the Council for Scientific and Industrial Research (CSIR), the Department of Science and Innovation (DSI), and various other government agencies or State-owned Entities account for almost half of external research funding. This percentage is declining over time, and for 2022, the reduction of some R3 million was largely driven by lower income from direct government contracts, although the full magnitude was partially offset by an increase in NRF funding.

Other categories of research funding sources include international grants, funding from national institutes and centres, and private sector research contracts. Funding from international grants and research contracts grew in the 2022 period, indicating a recovery from the COVID-19 driven decline seen in 2021, as well as reflecting UP's rising international profile and continued focus on strengthening private sector relationships. Funding from national institutes and centres declined by some R6 million for the year.

Overall, as shown in Table 2.7, external research funding increased by almost R65 million from R 614 918 186 in 2021 to R 679 744 387 in 2022.

	External research funding (R)				
Funding source	2018	2019	2020	2021	2022
Government-related grants	375 030 115	397 911 360	351 909 595	303 576 159	300 909 759
International grants	152 954 789	200 810 336	160 984 633	191 825 294	255 885 116
Private sector research contracts	105 769 122	95 009 218	95 360 843	83 997 969	93 899 834
National institutes and centres	24 481 304	24 123 071	18 458 224	35 518 764	29 049 678
TOTAL	658 235 330	717 853 984	626 713 094	614 918 186	679 744 387

Table 2.6 External research funding

2.4.2.2 Enterprises University of Pretoria

Enterprises University of Pretoria (Pty) Ltd is a wholly owned subsidiary of UP and, through the company, we leverage our embedded knowledge, competence and technical expertise in teaching, learning, research and community engagement to provide fee-for-service training, research and advisory products and services. Additionally, we advance social responsibility through our Business Development Support (BDS) Programme, which focuses on small-, medium- and micro-enterprises for enterprise and supplier development.

Products and services are developed by UP academic and professional service expertise, with delivery to market through effective business models. A wide range of training courses and programmes are available to meet company and individual needs. Research and advisory services are provided through dedicated Business Units in diverse specialised areas such as Asset Integrity Management, Clinical Research, and Sensory Evaluation and Food Technology.

Table 2.7 shows the income generated by Enterprises University of Pretoria (Pty) Ltd.

	Enterprises University of Pretoria (Pty) Ltd annual revenue (R)				
	2018 2019 2020 2021		2022		
Revenue	249 898 393	232 925 367	169 432 849	223 971 337	225 045 233

Table 2.7 Enterprises University of Pretoria (Pty) Ltd annual revenue

2.4.2.3 Intellectual property development and commercialisation of research

An important means of contributing to societal impact is through commercialisation of research. Additionally, it enhances the University's positioning and is a source of third-stream income. For 2022, UP intellectual property activity showed a modest decline relative to 2021, as reflected in Table 3.11 in the Report of Senate to Council.

By the end of 2022, ten spinoff companies continued to be active and in existence for at least two years. Collectively, they employed 198 employees, demonstrating sustainability as well as employment creation.

2.4.3 Operational sustainability

Central to our sustainability is the way that we function and conduct ourselves as an institution, and within our operations. This includes creating the conditions for staff and students to thrive; demonstrating stewardship in the use of natural resources in our operations and care of our spatial footprint; and being a good neighbour within our host communities, contributing to their development and upliftment.

2.4.3.1 Staff practices for sustainable development

As UP pursues its intent to be a leading research-intensive university on the African continent, we acknowledge that this can only be done through people who create ideas and turn intentions into reality. Our sustainability is anchored on this principle, and we continue to focus on attracting, developing and retaining talent to support the University's strategic agenda and institutional goals; creating just and inclusive workplaces with decent work conditions and the protection of labour rights; and enhancing the holistic well-being of staff. While these aspects are addressed in various sections of this Annual Report, salient highlights will also be discussed here.

Strengthening the leadership, technical and social competencies, and skills needed to advance our transformation agenda and achieve our institutional goals is a key focus of our talent management. This is evident in the suite of programmes in place, ranging from supervisory and management development, to enhanced support for the attainment of doctoral qualifications in staff from designated groups, and leadership and coaching programmes at senior managerial and executive levels.

A supervisory programme to improve managerial and supervisory skills was implemented in 2022, with 84 employees participating. Since 2016, the University has also been participating in the New Generation of Academics Programme (nGAP), led by the Department of Higher Education. The programme focuses on addressing national critical skills shortages and increasing the number of individuals from designated groups with doctoral degrees. Five candidates enrolled in 2022, bringing the number of enrolments from inception of the programme to 36. By the end of 2022, a cumulative total of 18 candidates had completed their doctoral studies. The Programme for Academic Leadership (PAL), which has been in place from 2012, continued through the year, with 20 senior academics participating. Participants are drawn from the pool of deans, deputy deans, heads of departments, professors, and associate professors. Additionally, two deans and one deputy dean participated in the Executive Coaching Programme during 2022.

Beyond established staff development programmes, UP actively provided internship and learnership opportunities during 2022, to address youth unemployment and improve employability. Sourcing funds from various SETAs, and partnering with Universities South Africa (USAf) on the Presidential Youth Employment Intervention (PYEI), 327 interns and learners were enrolled during the year. These included 20 learners living with a disability. Opportunities covered a wide range of fields, with a cost of over R16 million for the year.

During the year, we continued our efforts to maintain and strengthen a just and inclusive workplace with decent work conditions, and the protection of labour rights. Committee structures set up to enable active involvement and participation of staff members in the people matters of the University continued to function effectively. These cut across policy formulation, recruitment, skills

development and benefits management, and seek to enhance transparency and the pursuit of fairness in the workplace. Similarly, during the year, the Human Resources Department continued the ongoing process of policy review and alignment to ensure currency and consistency in the University's policies and procedures that are related to people practices.

The University continued efforts to strengthen relationships between the University management and organised labour. The University of Pretoria Bargaining Forum (UPBF) engaged on various staff matters of mutual interest and, in July 2022, a Relationship Building by Objectives (RBO) session was held with recognised unions. The RBO session took place after union leadership elections, and partly served as an onboarding process for newly elected union leaders. Collective bargaining at UP is characterised by constructive engagement, and we continue to explore effective mechanisms to improve engagement between the employer and recognised unions.

The quality of leadership and the overall institutional culture and environment, as discussed above, are significant determinants of employee well-being. To complement these, dedicated efforts to enhance the physical and emotional health and well-being of employees continued throughout the year. These comprise confidential Employee Wellness Programme (EAP) services, managed centrally from the University's Hatfield campus through EWP@UP. In addition to providing support to individuals, EWP@UP ran several campaigns and a series of virtual lunchtime talks on issues such as mental health, addressing the stigma of HIV/AIDS, effective workplace relations, and the importance of physical activity.

2.4.3.2 Towards the resilient graduate

We see the resilient graduate as an inquiry-led being, with the ability to adapt and bounce back from the inevitable shocks and adversity encountered in life. Lifelong learning is embraced and used to anticipate challenging circumstances, harness internal and external resources to navigate complexity, and continue to make a difference. This is particularly important in a world that is characterised by rapid change, complexity and uncertainty.

The University has adopted a holistic and integrated approach to developing students so that they are prepared to capitalise on life opportunities, and at the same time, contribute meaningfully to the good of society. This encompasses development and support through the curricular programmes and faculties that students are enrolled in, and through extra- and co-curricular student life led by the Departments of Student Affairs (DSA) and of Residence Affairs and Accommodation, known as TuksRes.

Our pathway to resilience comprises a connected set of dimensions: an inclusive environment where students have a voice that is valued and respected is a precondition for building resilience; optimal physical, mental and emotional well-being with positive lived experiences improves the ability to learn; effective teaching and learning with academic support builds capability and improves success rates; nurturing a broader suite of social and leadership competences shapes active citizens and future leaders; and intentionally enhancing work readiness enables a smoother transition from university to working life, and a higher likelihood of successful employment.

Extra- and co-curricular student activities are governed by the UP Policy on Organised Student Life, and the University has a wide range of organised student life structures, societies and special interest groups. An important part of this is representation of the student voice in University governance,

and the fostering of democratic values. Elections for the UP Student Representative Council (SRC) take place annually, and are conducted with the highest integrity. Student leaders take their place on various platforms, and participate in institutional policy development and decision-making.

To support the transition from school to university, the DSA runs the First-Year Experience (FYE) Programme throughout the academic calendar year, assisting first-year students to deal with challenges and issues they face during their first academic year.

The DSA also has a dedicated Disability Unit (DU) that assists with the added challenges experienced by people with disabilities as they adapt to the new University environment. In addition to providing support to enrolled students with disabilities, the DU also facilitates an active recruitment process in the Gauteng province for Grade 12 learners with disabilities.

The University provides a range of resources to support and sustain the well-being of students. The Student Counselling Unit (SCU) is staffed with professionally accredited psychologists, and provides readily accessible counselling services through virtual or face-to-face consultations. Information sharing and health-related campaigns are undertaken through a range of media and channels such as podcasts, posters, information sheets, the SCU-B chatbot, the DSA/SCU website, and social media.

Student Health Services provide comprehensive primary healthcare and health promotion programmes to all registered students. Staff include medical doctors, professional nurses, optometrists, dieticians, and HIV counsellors. Each campus has a healthcare facility, and services provided include prevention and screening programmes, reproductive health, curative care and chronic disease management, and emergency and referral services.

Learning and teaching THE UP WAY has a dedicated focus on enhancing the capability of students as they undertake the university journey. Ongoing innovations in teaching and learning continue to strengthen support mechanisms for student success. Recognising the complexities and multiple determinants associated with student success, the DSA initiated deeper engagement with faculties and professional services during the year, to strengthen student support networks, and to develop a more integrated approach to identifying and managing students at risk. This included leveraging a wide range of support networks comprising faculty advisors, tutors, mentors, trained class representatives, student leaders in faculty houses and peer learning communities.

Academic success is intertwined with developing future leaders and responsible citizens who contribute towards building an equitable society that respects human rights and pursues social justice. Through its Student Development Unit, the DSA provides leadership and personal development training opportunities to students participating in various UP student structures. In addition to formal leadership programmes, UP has a range of student-led committees and initiatives that engage the student body, play a role in student development, and demonstrate citizenship with societal contribution. The DSA also hosts dedicated leadership programmes in collaboration with various partners. One such programme is the UP Friedrich Ebert Stiftung Democracy School for Young Leaders, which is open to all UP students in leadership positions, or those aspiring to such. Participants engage on issues of human rights, social justice, civic participation and civic responsibility. The Girls for Girls (G4G) programme is a particularly successful international mentorship and leadership initiative originating from Harvard. The programme helps young women to develop the courage, vision, and skills for public leadership.

Strengthening work-integrated-learning is an important feature of our curriculum transformation

and programme design, as we prepare students for the future world of work. Increasing focus is being placed on embedding innovation, entrepreneurship and digital literacy into the broad suite of student competencies. In support of curricular initiatives, free learnerships and ready-for-work preparatory courses are offered to all registered students and new graduates. Well-designed career events and forums are also held for students to engage with potential employers, and access employment opportunities.

2.4.3.3 Towards a resilient campus

The expansive footprint of the University covers an area of some 1 165 ha, and houses more than one million square metres of built-up area. UP's infrastructure includes more than 735 buildings, some dating back to the early 1900s. More than a third of the structures are classified as heritage buildings and are subject to the provisions of the National Heritage Resources Act 25 of 1999. The University has a conservation management plan in place to ensure that these buildings are maintained.

The UP property collectively carries more than 60 000 individuals comprising students and staff. Activities across the University, and the potential impact thereof, relate to human interactions on the campus and its surroundings; work in the core functions of teaching and research; and services arising from or supporting its core functions. Potential impacts – both positive and negative – are not limited to the University, as the different campuses are interspersed and co-exist within a diverse array of mixed-use human settlements.

All real estate and facility-related services are provided or coordinated by UP's multi-disciplinary Department of Facilities Management, which has a broad portfolio of accountability encompassing the planning, development, operational management, maintenance and record-keeping of the University's growing estate. The Department shapes the strategic approach around how infrastructure, land, related services and logistics support the broader University strategic intent, and it manages the operationalisation of such activities. It also plays a central role in addressing and navigating the environmental challenges associated with such a large and complex operation. As a quality-driven leader in higher education estate and facilities management, the Department continues to benchmark favourably nationally and internationally.

In managing the University's infrastructure and land, and the provision of various support services, decision-making is significantly influenced by the need for optimal management of water, energy and waste. Stewardship activities include protecting resources and reducing consumption, recycling water, exploring and utilising alternative energy sources, preventing environmental impacts such as pollution, rehabilitating land when necessary and supporting biodiversity.

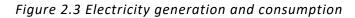
The planning, design and construction of infrastructure are key elements of the University's approach to sustainability. The design of new buildings, or the refurbishment of existing ones, incorporates systems to reduce energy consumption. Energy efficiency is prioritised when purchasing energy-intensive equipment. As part of equipment replacement programmes, failed heating, ventilation and air conditioning (HVAC) equipment is replaced by units that incorporate inverter compressors, which are more energy efficient. Existing light fittings are replaced with energy-efficient equivalents. Supporting a cultural shift to energy conservation, the University has a set of simple rules to promote energy saving by all members of the University community.

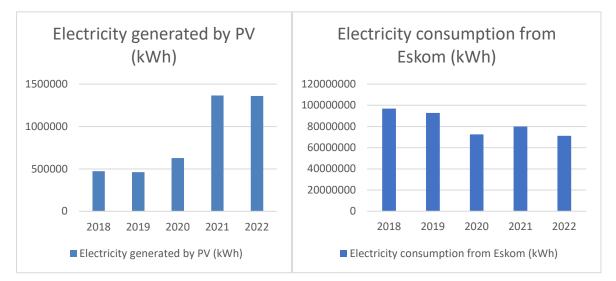
Various building management systems are used to monitor performance across campuses. Efforts are underway to improve and extend them through standardisation and consolidation of all systems to one front-end system to manage and view plant and equipment. During the year, the number of electrical metering points was increased to improve data availability. An exercise is currently underway to obtain electrical performance certificates for the University, in order to meet legal requirements. The water management system also continues to be improved, and during the year more remote meters were installed for greater accuracy of information. Water pressure is actively monitored, enabling prompt action when water pressures drop. Daily leak detection reports also help to minimise water wastage.

During the year, significant challenges were experienced due to limitations of the City of Tshwane Metro Municipality's (CTMM) bulk infrastructure, with frequent interruptions in bulk services. These challenges reside within the CTMM, and were compounded by the extreme load shedding experienced during the year. The University has sought to address certain issues and facilitate better working relationships with the Municipality through a revised Memorandum of Understanding. Improving municipal bulk infrastructure, however, is likely to take many years, and this has necessitated duplication of bulk services such as back-up power and water supplies by the University. This has come at great cost, particularly around the dramatically increased diesel consumption during periods of load shedding. UP currently has 76 generators providing more than 42 MW of electricity.

A significant infrastructure development by the University is the installation of photovoltaic (PV) panels to improve energy security and increase utilisation of renewable energy. The initiative has been underway from 2018 through a Power Purchase Agreement (PPA), with the installation of PV panels on new and existing buildings. By 2022, a total of 2 179 panels had been installed, bringing the University's PV capacity to approximately 1 MVA. For the year, 1 360 741 kWh of electricity was generated by PV panels, on par with the amount generated in 2021. In 2023, PV capacity will be increased by another 2 MVA, through the installation of a ground-mounted PV plant at the Innovation Africa@UP campus. Other initiatives to improve energy security and ensure business continuity during the year included the conversion of mobile generators to permanent installations (Jacaranda and Protea Mbalenhle generators), and new generator installations at the HW Snyman Building, and the Asterhof and Vergeet-my-nie women's residences.

Despite the challenges of intense load shedding and suboptimal municipal bulk service delivery, UP continued efforts towards effective resource management. A shift towards greater use of renewable energy is reflected in increased electricity generated by PV (see Figure 2.3), and a decline in electricity purchased from Eskom, although the latter has been significantly influenced by reduced Eskom capacity and consequent load shedding. At the same time, 2022 saw increased campus activity compared to 2021, due to the lifting of COVID-19 lockdown restrictions and the associated increased resource demands.





In 2022, UP produced its seventh carbon footprint report in terms of greenhouse gas emission (GHG). This is in line with our continued commitment to sustainable development and the rigorous application of supportive practices. As with previous reports, the GHG Protocol Revised Accounting Standard (2013) for accounting and reporting is used, applying an operational control approach. Reporting covers the primary campuses as our organisational boundary. We report on:

- Scope 1: direct emissions driven by the UP-owned vehicle fleet, back-up generator use, and the use of LPG gas in research laboratories; and
- Scope 2: indirect emissions from the use of purchased electricity.

While we have been measuring Scope 3 data (other indirect GHG sources) for the past three years, at this stage they do not form part of the carbon footprint assessment.

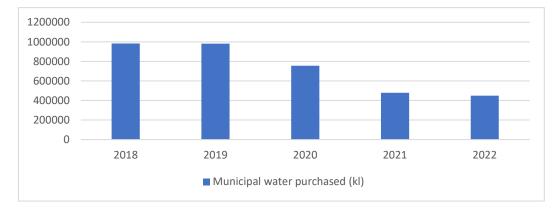
Table 2.8 provides details regarding the University's carbon footprint.

Intensity metrics	2018	2019	2020	2021	2022
Floor area (m²)	994 998	1 018 878	1 028 931	1 039 970	1 043 525
Total carbon footprint (tCO2e)	92 745	98 337	64 495	76 540	78 648
Tonnes CO _{2e} /m ²	0.09	0.10	0.06	0.07	0.07
UP population	60 184	58 331	59 754	61 497	63 420
Carbon footprint (t CO _{2e} / person)	1.54	1.65	1.07	1.24	1.24

Table 2.8 Intensity metrics

Guided by our detailed Water Management Plan, various water conservation projects and activities continue to increase awareness and commitment to protecting this resource, and to optimising its

use across the University. The design of new buildings and refurbishment of existing ones include high-efficiency plumbing systems to reduce usage and wastage. This is supported by preventative and scheduled maintenance, coupled with early leak detection and intervention to prevent water losses. Reducing the University's large-scale landscape water use is addressed by water-efficient irrigation systems, the implementation of water-wise gardening, and using recovered water sources. Rain water is harvested and stored, and where possible, reclaimed water is used safely. Storage tanks and reservoirs are also used to store borehole water. Year-on-year reductions in municipal water consumption are demonstrated in Figure 2.4.



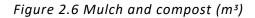


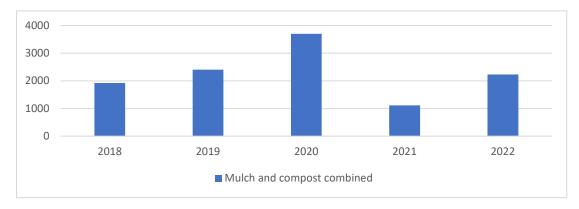
Under normal operational conditions, UP is a major generator of general waste (recyclable waste, food waste and garden waste). During 2022, a total of 108 857kg (Figure 2.5) of waste was recycled and an amount of R151 201.00 was received in rebates. This was a 19.75% increase in recycling compared to the same period in 2021. This increase was directly attributable to COVID-19-related lockdown restrictions being lifted, with students returning to campus and the resumption of normal student life.



Figure 2.5 General waste recycled

The upgrading of the compost and mulch production facility on the Hillcrest Campus has substantially decreased the need for, and costs of, transporting garden refuse to landfill sites. Compost and mulch to the value of approximately R2.1 million was produced and used on all the University properties. The use of mulch in plant beds results in a decreased need for irrigation water, prevents weed infestation and creates healthier soils. Figure 2.6 shows the amount of mulch and compost produced at UP, indicating an increase in 2022 after declining in 2021.





2.4.3.4 UP as an anchor institution

Our six primary campuses all form integral parts of their host communities, with multiple interdependencies and shared ecosystems. In each precinct our presence is significant due to our footprint size, access to intellectual and financial resources, and major contribution to economic and social activity. As such, we function as an anchor institution in these areas. To this end, we intentionally seek to support a flourishing economic, social and physical environment in the surrounds of all the campuses. This is in recognition of the fact that we have a shared future with our neighbours, and our own sustainability is dependent on that of our host communities. Our institutional anchor strategy, which is incorporated into the UP Spatial Development Plan 2020 – 2025, is underpinned by the philosophy of mutually beneficial and symbiotic relationships with our community stakeholders. The strategy is consistent with the institutional 5-year strategy, *Destination 2026 and Beyond*, as well as with the Institutional Policy on Community Engagement.

A key focus of the anchor strategy has been on the Hatfield/Hillcrest area, through the Hatfield Campus Village project, encompassing the Hatfield, Hillcrest and South Campuses. During the year, UP continued participation in the Hatfield City Improvement District (CID), a non-profit organisation funded by property owners within the district boundary. The initiative is in partnership with the Tshwane Municipality and collaborates with local police services and emergency services. Within this area, UP occupies the largest portion of land, and makes the largest financial contribution in terms of levies paid. The initiative continued to lead urban renewal and social transformation projects around the University's campuses, working collaboratively towards shared safety and security, urban management and social upliftment through community engagement.

While some learning from the Hatfield Campus Village project can be transferred in the broader UP context, the other campuses each have their own distinctive challenges due to their unique locations. The Groenkloof, Prinshof and Onderstepoort campuses all face the challenges of isolation of students on the campus and general crime in the surrounding areas, causing the campuses to become more inwardly focused. The challenge is particularly acute for the Prinshof Campus, where the campus is fragmented and the neighbouring Melgesedek infrastructure is derelict and inhabited by homeless people. The area is a known crime, drugs and prostitution hotspot, and continuous discussions are being held with the City of Tshwane and other stakeholders to upgrade the Melgesedek property and advance inner-city renewal.

The Mamelodi Campus, situated in the heart of Mamelodi, is by its very nature an integral part of the community and their hopes for development. It is surrounded by formal and informal residential areas, with semi-formal and informal retail and trading. The precinct has a wide range of stakeholders across multiple sectors and constituencies. A key aspect of fulfilling its role as an anchor campus is blending with society and demonstrating social citizenship. As a well-resourced entity in the midst of a resource-poor setting, the campus is easily seen as an "oasis" that is separate from local existence, and unreachable. The campus, in collaboration with other departments, is actively working to "soften the hard borders" between the campus and the community to create a greater sense of "us", and in the process drive further socio-economic development. Several projects and clinics with "on-campus" and "off-campus" activities enhance integration of the campus and the community. These include engagements through the Mamelodi Business Clinic, which incubates entrepreneurial activities and provides community training; community forums; various Early Childhood Development initiatives; and the Mamelodi Campus Animal Clinic.

2.4.4 Driving sustainability through our core functions

Whereas operational sustainability tends to be inwardly focused, driving sustainability through our core functions has a distinct outward focus. Through our core functions, the graduates we produce and the new knowledge we create, are contributions that drive impacts at a societal level. In this section we focus on teaching, learning, research and community engagement through a sustainability lens. Greater detail of the core functions can be found in the Report of Senate to Council (Section 3).

2.4.4.1 Teaching and learning

Quality education has an impact at individual, community and broader societal levels. For the individual, it is a proven vehicle to change the life prospects of people. These individuals uplift their communities, and broader societal development is contingent on having the requisite human capital to meet developmental needs. UP is well recognised for excellence in education, and is a significant contributor to self-actualisation and development at community, national and continental levels. Figures 2.7 - 2.10 show the University's skills outputs in various fields.

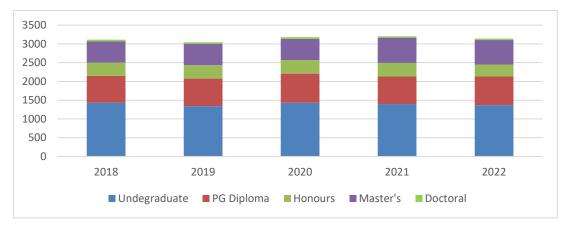
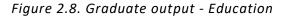


Figure 2.7 Graduate output - Business/Management



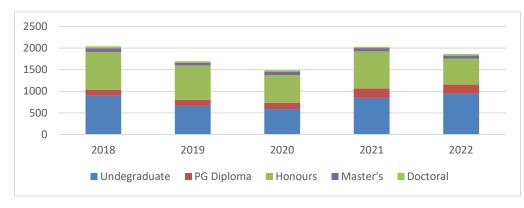


Figure 2.9 Graduate output - Other Humanities

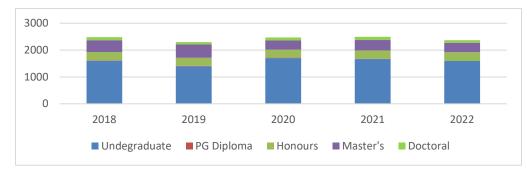
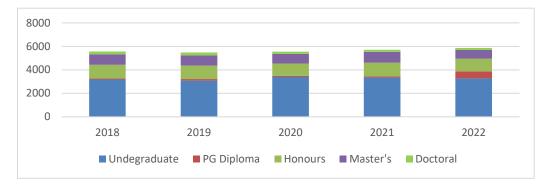


Figure 2.10 Graduate output - Science, Engineering and Technology



2.4.4.2 Research

Our research spans fundamental research at discipline levels, through to transdisciplinary research that addresses the complex challenges facing society. Within this spectrum, we recognise that transdisciplinary research is anchored in disciplinary excellence. In our quest to be a leading research-intensive university, we are continually working to increase research that is relevant to societal needs, and that drives societal development and change. To amplify our impact, we pursue collaborations with other universities within South Africa, across the African continent, and globally. Figures 2.11 - 2.14 show the research output units produced by the University in the various broad fields of study for the past five years.

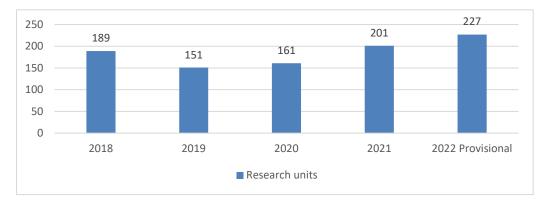


Figure 2.11 Annual research units - Business/Management

Figure 2.12 Annual research units - Education

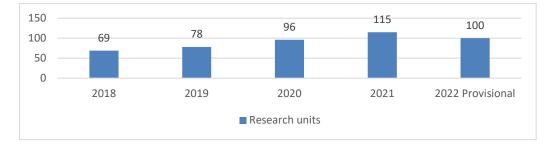


Figure 2.13 Annual research units - Other Humanities

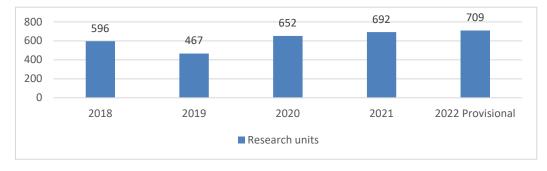
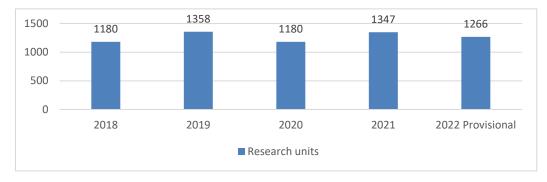


Figure 2.14 Annual research units - Science, Engineering and Technology



2.4.5 Our alignment to the SDGs

An important aspect of our intent to align more deeply with the SDGs was to reflect on their meaning in relation to our strategic intent, and the work that we do. In making sense of them within our

context, it is evident that we contribute across the raft of SDGs, with varying levels of intensity. Our contributions are through three potential pathways: directly contributing to achieving tangible targets; enabling their achievement through building capability that supports action; and influencing the implementing landscape, through evidence informed policy-shaping.

Connected to our intent of advancing a transdisciplinary agenda, we have developed a framework to leverage linkages and dependencies between individual SDGs and groups of SDGs. This framework is based on our view that the SDGs represent complex and related ecosystems, and are central to improving the human condition.



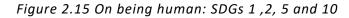
Poverty and inequality with their myriad of faces are inextricably linked, and are the most fundamental aspects of our humanity and human condition. Along with the food needed for survival, they are at the base of our hierarchy of needs. On a foundation of humanism and humanity, we seek to realise the potential of all, with good health and quality education being the critical enablers. As we reach our full potential, individually and collectively, we can intentionally enhance our social and economic development to improve our human existence – in the work we do, the industries and cities we create and the peace we foster for inclusive co-existence, and where all people are treated with dignity and respect.

In our personal and societal development, we must be mindful that we exist within planetary boundaries that temper the way in which we develop. The way we use and protect our resources shape the sustainability of our existence. At the same time, we co-exist with all other forms of life and within a multitude of interdependent ecosystems. Against this holistic background with all its complexities, we recognise and embrace the roles of collaboration and partnerships across the spectrum of sustainable development. In their optimal forms, they give expression to our diversity with inclusivity, have the potential to create leverage for innovation and impact, and help us to navigate trade-offs or create multiple value streams within our state of uncertainty and complexity.

The logic we have applied to clustering the SDGs is entirely congruent with our institutional strategy, and the core themes of **People** (On being human and Our human potential), **Prosperity** and **Peace** (Our human existence) **Planet** (Our planetary boundaries and Co-existing with all forms of life), and **Partnership** (the cross-cutting nature of SDG17).

As a research-intensive university, our intent to address societal issues and have positive impact is

reflected in the consistent increase in our SDG-related research outputs for the past five years (see Figures 2.15 - 2.19.



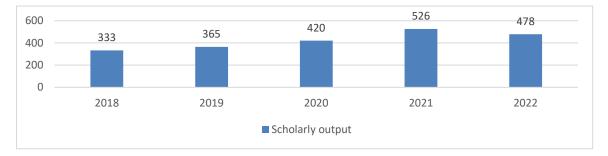


Figure 2.16 Our human potential: SDGs 3 and 4

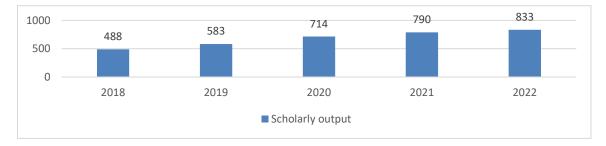






Figure 2.18 Our planetary boundaries: SDGs 6, 7, 12 and 13



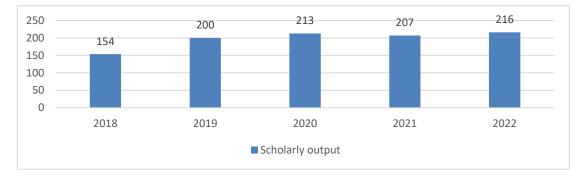


Figure 2.19 Co-existing with all life forms: SDGs 14 and 15

2.4.6 Conclusion

In conclusion, we take our leadership role with regards to sustainable development seriously. This is seen through how we conduct ourselves as an institutional citizen, and our philosophy of a sustained and substantive strategic intent to achieve societal impact through high-quality education and cocreation of knowledge. We believe that integrating sustainability into our institutional strategy is innovative, and is a significant stride towards achieving the step change needed for just and inclusive societal development.

We, however, recognise that more progress needs to be made, and in the spirit of ongoing and iterative learning, we continue our relentless pursuit to contribute meaningfully to a better South Africa, African continent, and world.

2.5 Statement on Transformation

Transformation is integral to UP's core business and is driven by our commitment to inclusion, diversity, belonging, and equity across all departments and faculties. The University continues to prioritise transformation and remain intentional in achieving our goals as identified in the UP Transformation Plan, amongst them:

- → Creating a thoroughly inclusive institution with a diverse student body, taught by a diverse, qualified academic staff cohort;
- → Producing impactful, high-quality research that matters, and that contributes to solving complex issues;
- → Promoting a transdisciplinary approach to research and deploying knowledge for social, economic and environmental change;
- → Eliminating gender-based violence, sexism, racism, homophobia, xenophobia and all kinds of discrimination and prejudice;
- → Creating a University that is welcoming, enabling and future oriented;
- → Pursuing continuous curriculum reform, renewal and transformation;
- $\rightarrow\,$ Achieving excellence and innovation in teaching and learning to achieve higher access and success rates; and
- \rightarrow Offering hybrid modes of teaching, learning and assessment that are relevant to a 21st century world where ubiquitous access to information is a prerequisite.

It remains our priority to ensure that UP is transformed, diverse and welcoming to all students and staff from diverse socio-economic and cultural backgrounds. In realising this objective, the University is proactively implementing steps to ensure that transformation permeates every aspect of UP, turning the University into an intellectual home to student and staff cohorts that represent South Africa's rich diversity; providing the conditions necessary for our diverse campus communities to feel welcome, supported, included and valued, and to thrive academically and as researchers. To this end, further measures were implemented to ensure that the strategic goals indicated in the UP Transformation Plan are realised. The key elements of transformation at UP are presented in the following sections.

2.5.1 Student access, diversity and inclusivity

The UP student demographic profile has steadily changed over the past years (see Table 2.9). Where 55.2% of our contact students were black in 2017, this percentage increased to nearly 65% in 2022. Of this, the majority, 59.64%, are women.

Race	201	.8	201	19	202	20	2021		2022	
Group	Enrolled	%	Enrolled		Enrolled		Enrolled		Enrolled	
African	23371	48.17%	24430	49.92%	24864	51.04%	26658	52.73%	27370	54.78%
Coloured	1405	2.90%	1485	3.03%	1501	3.08%	1571	3.11%	1619	3.24%
Indian	2959	6.10%	3046	6.22%	3143	6.45%	3405	6.73%	3333	6.67%
White	20767	42.81%	19964	40.79%	19190	39.39%	18908	37.40%	17606	35.24%
Not Specified	13	0.03%	18	0.04%	14	0.03%	17	0.03%	36	0.07%
Total	48515	100%	48943	100%	48712	100%	50559	100%	49964	100%

Table 2.9 UP contact student enrolment by race

UP has for many years provided funding support to enable access to higher education by financially disadvantaged students. The University's ability to enhance its assistance significantly was, to some extent, constrained by the financial challenges brought about by the COVID-19 pandemic and the general downturn in the economy. The University implemented a large portfolio of bursaries consisting of the University's own funds, funds raised through donations, gifts, grants, and funding administered on behalf of third parties such as state departments, foundations and provincial governments. UP also has a strategic bursary fund to ensure that our diversity targets for undergraduate and postgraduate student numbers are met (see Section 3.6 for details on student financial aid).

As explained in Section 3.6, no qualifying NSFAS students were required to make upfront payments (a first payment) when registering for the 2022 academic year.

In order to promote a sense of inclusion and belonging, the Department of Student Affairs in 2022 introduced the First-Year Experience (FYE) programme to provide supplementary support to new first-time entering students throughout their first year, beyond the academic orientation week and residence welcome programme. The focus of the FYE programme is on psycho-social content,

covering topics on health and well-being, financial wellness, cyber literacies, sexual and reproductive health and rights, anti-discrimination, leadership, and resilience. This empowerment programme for first-years seeks to facilitate their smooth integration into the UP-student community and to foster their sense of belonging in a diverse student body.

The ever-increasing diversity profile of the student body in 2022 manifested in all areas. At least 69% of the more than 8 000 beds in University-owned residences were taken up by black students. In terms of student leadership, 16 of the 28 residence house committee chairpersons and 18 of the 19 members of the SRC were black.

2.5.2 Staff transformation

The University's 2021 – 2025 Employment Equity (EE) Plan is currently in the third year of implementation. As at December 2022 (second year of implementation), the University's performance was at 32.9% against the 2022 target of 34%, i.e., a negative variance of 1.1%. This represents a 4.5% increase from the 28.4% baseline. Strategies to fast track the achievement of the targets towards the 45% target set for 2025 are being implemented.

New Generation of Academics Programme (nGAP)

As at December 2022, the University had enrolled 36 nGAP candidates, which was an increase from 31 candidates in the previous year. By the end of 2022, 18 nGAP lecturers had completed their doctoral studies, marking an increase from 16 in 2021. All nGAP lecturers are from designated groups, with females making up 71.1% of the lecturers.

Programme for Academic Leadership (PAL)

In keeping with the University's commitment to academic leadership development, a cohort of 92 candidates in senior academic roles has participated in the PAL since inception in 2012. During 2022, twenty participants were enrolled for this programme and the distribution of the participants is as follows: deans: 5, deputy deans: 6; heads of departments: 7; professors: 1; and associate professors: 1.

Executive Coaching Programme

The UP Executive Coaching Programme offers coaching to all newly appointed deans and directors as well as to a selection of deputy deans (where it is indicated that the latter would benefit from immediate coaching). The aim of the programme is to maximise leadership potential. Two deans and one deputy dean participated in the programme in 2022.

Management Development Programme

The Management Development programme was not implemented due to insufficient funding; however, it has been re-instated for 2023, with 20 participants currently enrolled. A supervisory programme was implemented during 2022 to equip participants with managerial and supervisory skills. Candidates are required to attend at least 12 days of lectures in monthly block sessions spread over six months. They are also required to submit assignments, work in syndicate groups and write exams for each study module. Eighty four supervisors and managers participated in the programme in 2022.

Future Professors Programme (FPP)

The DHET implemented the Future Professors Programme during 2021. This is a national, collaborative initiative, aimed at developing the qualities of academic excellence and leadership in university scholarship in order to contribute to the development of a future South African professoriate. The DHET invites universities annually to nominate between four and five prospective fellows. Academic career development advice is provided to FPP fellows by a panel of A-rated scholars. The programme is tailored towards the individual's research and professional trajectory and the demands of their discipline. Four UP senior lecturers, all of them black women, participated in the programme in 2021. No additional participants were enrolled for 2022.

Internships and learnerships

The University was able to source funds from various SETAs to support the appointment of unemployed youth and provide them with skills development to enhance their employability. We also partnered with USAf on the presidential youth employment initiative. A total of 289 interns and learners were appointed in 2022.

2.5.3 Students and staff with disabilities

In an effort to recruit learners with disabilities to the University, and with a specific focus on black learners with disabilities, the Disability Unit (DU) facilitates a recruitment process for Grade 12 learners with disabilities from schools in the surrounding townships in the Tshwane region. In addition, the DU assists with career counselling and provides information about course offerings as well as co-curricular activities offered at the University, including accessible sporting codes, student leadership opportunities and the range of professional services on offer.

In 2022, the DU provided dedicated support to 559 registered students with visual, hearing, neurodevelopmental and psychiatric disabilities. In addition, the complete return to contact education in the second semester resulted in the reinstatement to full capacity of examination support for students with disabilities.

2.5.4 Student life

In line with the formalised vision for student life at UP, student extramural and co-curricular programmes are strongly underpinned by transformation. Accordingly, the orientation and onboarding programmes for new first-year students referred to above are aimed at achieving the institutional transformation goals of promoting inclusivity and social cohesion as well as a sense of belonging among our students, as key contributors to holistic student success.

The Policy on Organised Student Life was amended and approved by Senate in September 2022. The policy provides clear guidelines for the proper functioning of all organised student life structures, creating a vibrant extra- and co-curricular environment in which students can participate actively and constructively in well-structured programmes and activities that provide for personal growth and professional development outside the classroom. The overarching aim is to cultivate well-rounded, successful graduates and responsible citizens. The policy provisions support good student governance and regulate the inter-relationships between different student life structures and the UP student community. The policy also seeks to promote co-operation and to regulate the activities of the various student life structures within the UP value framework.

Within the ambit of this policy, four day houses, nine faculty houses, the PDBY student newspaper, the Student Discipline Advisory Panel, RAG Committee, Student Culture Committee and Student Sport Committee, the Constitutional Tribunal, a total of 125 registered student societies, a number of special programmes, and the UP-owned residences participated in the student life programme in 2022 with the support and assistance of the SRC.

As part of its focus on transformation and the empowerment of young women, the third University of Pretoria Girls4Girls mentorship cohort was hosted by the Department of Student Affairs as a special programme in 2022. Hybrid training and development sessions were held between August and October 2022, with online content being made available to accommodate mentees and mentors from across the country and even abroad. A total of 40 mentees and 14 mentors graduated from the programme, which focuses on enhancing the leadership skills of tertiary female students who are in their second, third or final year of studying in order to prepare them for the world of work and equip them with good leadership skills.

A number of transformational social and dignity projects were also rolled out to address issues of student hunger, sanitary towels for women, and housing for destitute students.

While concerns around COVID-19 continued to hamper student life programmes, the Department of Student Affairs and the Department of Residence Affairs and Accommodation continued to improve and expand the creative ways that had been developed in 2021 to proceed with sport, culture, leadership development, social life, community engagement, entrepreneurship training, mentoring and projects. The flexible hybrid approach to formalised extra- and co-curricular student leadership development and training also saw significant refinement in 2022.

By 2022, all student leadership election activities had been digitised and were successfully rolled out for the third consecutive year, building on the e-voting successes of previous years. The voter turnout in the 2022 election of the Student Representative Council increased to 22.42 %, compared to 17.82 % in 2021. A total of 10 351 out of 46 164 eligible voters cast their electronic ballots.

2.5.5 Policies and related initiatives

The University's commitment to creating a culture of zero tolerance of discrimination in all its manifestations is supported by the Anti-discrimination Policy. This policy ensures the University's progress towards creating a safe and inclusive study and work environment for all its students and staff.

The University continued to conduct activities aimed at creating awareness around the various issues covered by the Policy. The curriculum transformation conversations and the Institutional Culture Survey provided an opportunity for students and staff to have their say on how they experience the University's transformation, specifically with regard to its institutional culture within the teaching and learning and research domains. The recommendations from the two initiatives informed various aspects of the 2023 - 2027 Transformation Plan.

The Transformation Office streamlined its anti-discrimination reporting tool and launched access for students in 2022. Fifty-eight cases were lodged in 2022 with over 60 awareness interventions being implemented.

The provision of the online module on sexual and gender-based violence (GBV), which is available on clickUP, allowed staff and students to empower themselves on SGBV in their own time. The University hosted its annual Anti-discrimination and Social Justice Week as part of raising awareness regarding all forms of discrimination, as defined in the Anti-discrimination Policy.

The University's language policy was reviewed in 2021 to align it with the Language Policy Framework for Higher Education Institutions, which was implemented in 2022. The Policy was approved by Council in September 2021. The University is currently developing a language development plan to support the policy.

The University's Institutional Transformation Committee (ITC), an Executive sub-committee comprised of representatives from the University Executive, Transformation Committees within each faculty and professional service department, the various staff labour organisations and students, continued with its important work and identified priority focus areas for 2022. The ITC continued to work closely with the Transformation Office in designing, developing and implementing transformation initiatives across UP.

The ITC discussed and adopted three critical documents that support the transformation agenda, the Disability and Mental Health Protocols, and the 5-year Transformation Plan. It further strengthened the functioning of the Faculty and Departmental Transformation Committees by identifying key focus areas that committees were required to monitor and report on.

Overall, UP has made significant progress towards realising the goals of transformation. UP remains committed to fostering a diverse community of outstanding academic and support staff and students and, to this end, continues to raise awareness with regard to diversity and inclusivity. Not only has the University created appropriate structures to support it in realising its transformation objectives but it has resourced those structures to empower them to manage the change process.

2.6 Statement on Conflict Management

The University, through the Department of Human Resources (DHR), has been proactive in creating a conducive environment that fosters positive employee engagement and employee relations. Beyond the established institutional conflict resolution policies and procedures, i.e. Grievance Procedure and Disciplinary Code, the University has developed an Alternative Dispute Resolution (ADR) process, which is currently in the approvals process.

The majority of matters that escalated to the Commission for Conciliation, Mediation and Arbitration (CCMA) have been successfully defended or resolved at the conciliation level. External litigation is conducted in partnership with an external legal services provider retained by the University for this purpose.

There are four active union formations at UP that are part of three national union federations. The University continues to explore effective mechanisms of improving engagements with the recognised unions. Collective bargaining at UP is characterised by constructive engagement. During engagements at the UP Bargaining Forum (UPBF), there were no areas of disagreement which resulted in instability at the University. The University intends to continue with relationship-building initiatives and advocacy to maintain the benefits of the relatively positive engagement experienced. In 2022, there was strike action at the University initiated by APSA, which arose from dissatisfaction

with the delays in the finalisation of the alignment of the conditions of service for insourced workers (the Harmonisation Project). The strike action was resolved after 13 days.

Notable in 2022, was the introduction of bilateral meetings led by the Employee Relations Division of DHR to afford the unions an opportunity to raise any concerns early enough before they escalate to matters that can destabilise the workplace. This has assisted in minimising the escalation of matters prematurely and minimises delays in the resolution of matters. These bilateral meetings are held every two weeks with the respective individual unions, namely APSA, NEHAWU, SOLIDARITY and UPWO. The Vice-Chancellor and Principal, assisted by DHR and the Executive member responsible for human resources, continues to engage quarterly with the unions to ensure opportunities for the engagement of unions with senior management for information sharing and engagement on University matters. These efforts collectively continue to assist with the elevation of stakeholder management initiatives and effective dispute resolution mechanisms to ensure relative stability and labour peace.

The Legal Services Division in the Office of the Registrar is responsible for student discipline and other formal processes regarding students. It also oversees the enforcement of the Anti-discrimination Policy amongst students.

Successful student governance elections in 2021 and 2022 contributed to sustained campus stability in 2022. It was possible to commence and conclude the academic year without any delays to or disruption of orientation, graduations, examinations, elections or student life activities.

The Bill of Student Rights, as captured in the University of Pretoria Constitution for Student Governance, binds all students and student governance structures and stipulates the mechanisms for dispute and conflict resolution between students and student structures. The Constitution also provides for a Constitutional Tribunal that has the authority to adjudicate disputes arising from the Constitution, decisions or functioning of various recognised student structures, as well as any breach of the Code of Conduct for student governance structures.

The training for Residences Sub-Council members provides for effective conflict and multi-party resolution mechanisms in all residences. House committees play a prominent role in ensuring harmony and social cohesion in residences.

In August 2022, a small group of students disrupted a few classes on the University's Hatfield Campus following a failed attempt by a few members of the SRC to hold a "mass" meeting regarding the announcement of the increase in the first payment of tuition fees from 2023. The increase of the first payment of tuition fees had followed lengthy and detailed discussions with all stakeholders, including the SRC, in 2021. Mindful of the financial challenges faced by students, implementation of the increase had been postponed to 2023. The changes in the first instalment would be the first since 2016 and would still be lower than at most other universities. The first payment, due any time before registration, is part of the total annual fee and is not an additional charge.

The above-mentioned disruption of classes was short-lived and deliberations with the SRC on ways to assist students financially in 2023 continued for a considerable period thereafter.

2.7 Statement on Worker and Student Participation

2.7.1 Staff

At the centre of the University's success is the active involvement and participation of staff members in the people matters of the University. This is evidenced in the involvement of employees in various committees, which enhances transparency regarding human resources processes and practices impacting on employees. This involvement includes participation in University structures, including committees responsible for policy formulation, recruitment, skills development, employment equity and benefits management, as detailed in the University's policies and terms of reference for the respective committees. To this end, the University has managed the facilitation of an inclusive workplace which encourages differences of opinion to be aired and resolved, without escalating into unnecessary conflicts while improving communication across the University. Employees are consistently engaged with to enhance greater awareness and buy-in into organisational processes such as policy reviews. In 2022, the University started availing key Human Resources policies on videos in two languages, namely, English and Sepedi. This was part of a measure to ensure accessibility and understanding of Human Resources policies in the context of the diversity of the University workplace.

The University engaged continuously with various staff stakeholder groupings to gain a better understanding of their experiences and how UP can create an enabling environment for them to thrive and advance their career aspirations. In 2022, DHR conducted a survey to obtain the views of employees on the requirement for a child care facility to be established in the workplace. This survey provided a number of key insights which are being considered.

In accordance with the UP Remuneration Policy, the University Council determines the annual basic salary adjustments, subject to negotiations at the UPBF. The 2022 salary negotiations were concluded successfully with joint labour, comprising NEHAWU, UPWO and Solidarity.

2.7.2 Students

The SRC and its substructures, the Constitutional Tribunal, the Residence Sub-Council, Residence Advisory Board and residence house committees, faculty and day houses, organisations and registered clubs and societies, provide platforms for consultation and engagement on all matters outside the classroom environment. A well-established class representative system is also in place to ensure continuous engagement with students regarding all academic matters. These structures, as well as formal communication and escalation protocols for academic and non-academic complaints, provide students with the opportunity to raise their concerns with various levels of University management.

Through the standing practice of regular meetings of the Vice-Chancellor and Principal and the Vice-Principal: Student Life with the SRC, the following salient issues pertaining to the broader student body were discussed during 2022:

- → Challenges facing NSFAS students who have exceeded the N+1 rule;
- \rightarrow The provision of data for students who remained off campus during the first semester to enable them to participate in academic activities online;
- \rightarrow Initial fees and financial arrangements for 2023;

- \rightarrow Amendments to the Constitution for Student Governance;
- \rightarrow Residence occupancy and placement;
- → The affordability of, and living conditions in, private accredited accommodation;
- → Increasing the capacity of the Student Counselling Unit;
- → Student hunger and nutrition;
- → Funding opportunities for missing middle students;
- → Promoting multilingualism;
- \rightarrow Curriculum transformation;
- \rightarrow Safety and security of students outside the campuses;
- \rightarrow Gender-related matters; and
- \rightarrow Changes to the first instalments of tuition fees from 2023.

Students continued to have representation on the University Council, Senate and sub-committees of Senate, the Institutional Forum, the Institutional Transformation Committee and the Workplace Safety Committee of the University. The SRC was actively involved in preparing the University's self-evaluation report for institutional audit by the Council on Higher Education (CHE), and participated in sessions during the site visit that took place from 5 to 9 September 2022. Members of the SRC also formed part of the delegation that met with the Parliamentary Portfolio Committee on Higher Education and Training on 14 September 2022.

2.8 Statement on Code of Ethics

UP is both an ethical institution and workplace. The employer-employee relationship is supported by a set of policies and the Code of Conduct for employees, which sets the required ethical behaviour and professional conduct standards as expected by the University. Each new employee signs acknowledgement and acceptance of these conditions and line management has the responsibility to ensure compliance with the policies and the Code of Conduct.

The University's grievance procedure empowers employees to formally raise any concerns about behaviour, conduct or practices, that may compromise the Code of Conduct. Similarly, the Disciplinary Code and Procedure ensures that there are clear standards in place for dealing with any violation of the Code of Conduct.

While formal instruments are in place to support the upholding of the Code of Conduct, the University's Alternative Dispute Resolution (ADR) mechanism that was introduced in 2014 continues to gain popularity as a non-punitive, mutually beneficial process of ensuring acquaintance with and shared responsibility for acceptable ethical behaviour and professional conduct in the workplace.

The University has research and intellectual property policies and regulations that govern ethical and responsible conduct in research involving humans, animals and the environment and in developing, conserving, and transferring such knowledge. All researchers, including students and research fellows, must comply with the policies and procedures which are aligned with best practices and national and international regulations. The University's *Code of Ethics for Scholarly Activity* governs the ethical practice of research and innovation, and underscores the prominence given to research and human capital development at the University. The Code is intended to inspire UP scholars to pursue an ethos that promotes ethical responsibility in the quest for knowledge that involves

humans, animals and the environment as subjects of research, and in the development, conservation and transfer of such knowledge.

The Vice-Principal for Research, Innovation and Postgraduate Education chairs the Senate Committee for Research Ethics and Integrity, composed of Chairpersons of the nine Faculty Ethics Committees, GIBS, and the institution-wide Animal Ethics Committee. The Directors of the Departments of Enrolment and Student Administration and Research and Innovation, also attend the committee meetings on standing invitation. The Senate Committee for Research Ethics and Integrity is responsible for the continuous evaluation and improvement of policy measures of the University in line with statutory requirements and best practices for research ethics and integrity. All the Faculty Research Committees report to the Senate Committee for Research Ethics and Integrity at its biannual meetings.

Each Faculty Research Committee has procedures for review and ethics approval for research activities and projects, allowing for discipline-specific approaches. The Research Ethics Committee of the Faculty of Health Sciences complies with the guidelines of the National Health Research Ethics Council of South Africa, the Federal Wide Assurance (FWA) for the Protection of Human Subjects, and the US Department of Health and Human Sciences (HHS). The Faculty of Health Sciences Research Ethics Committee also assists other Faculties in reviewing research projects involving human participants. The UP online ethics approval system supports efficient administration and approval of applications. The Animal Ethics Committee, managed by the Faculty of Veterinary Science, follows the South African Veterinary Council (SAVC) guidelines.

In 2022, the University rolled out a research and innovation data management-focused subproject under the main information Governance and Privacy Protection Programme (iGaPP). This is with a focus on compliance with the Protection of Personal Information Act (POPIA), the forthcoming Academy of Sciences of South Africa's Code of Conduct for Research, and the European Union's General Data Protection Regulation (GDPR). Among the objectives of this iGaPP Research Data Management project, is to ensure that structures, policies and procedures are in place to ensure that the University complies with all regulatory and contractual obligations with regard to research data. This review resulted in updated and newly approved Research and IP policies and regulations approved by Senate.

3. REPORT OF SENATE TO COUNCIL

Senate is accountable to Council for academic, research and community engagement matters, and as such, submits biannual executive summaries to Council on matters considered at the Senate meetings. The summaries are augmented by the full agendas and minutes of the Senate meetings, which are available to Council members upon request from the Office of the Registrar. The ordinary meetings of Senate in 2022 were held on 19 May 2022, 14 July 2022 and 6 October 2022. A special Senate meeting was held on 17 February 2022.

3.1 Composition of Senate

The composition of the Senate, the appointment or election of members, the filling of vacancies and the responsibilities and duties of members are as prescribed by the Statute of the University.

In 2022, the Senate was constituted as follows:

- (a) Ex officio members of the Senate, namely the
 - (i) Chairperson of Council;
 - (ii) Deputy Chairperson of Council;
 - (iii) Principal;
 - (iv) Vice-Principals;
 - (v) Executive Directors;
 - (vi) Deans and Deputy Deans as well as any academic staff members who have similar status and who have specifically been declared members by the Senate;
 - (vii) Heads of academic departments;
 - (viii) Academic staff who have similar status to the Heads of academic departments and who have specifically been declared members by the Senate;
 - (ix) Registrar;
 - (x) Chairpersons of schools; and
 - (xi) Chairperson of the Institutional Forum.
- (b) Members who are nominated or elected, namely -
 - (i) four members nominated by the SRC;
 - (ii) two employees, who are not already members of the Senate, elected from the ranks of the permanent academic employees; and
 - (iii) two employees, who are not already members of the Senate, elected from the ranks of the permanent non-academic employees.
- (c) The Directors of professional service departments, and any other person invited by the Chairperson, may attend the meetings of Senate by invitation.

Incidental vacancies in the category of members who are nominated or elected are to be filled as set out in subparagraph (1)(b) of the Statute for the remainder of the previous incumbent's term of office.

3.2 Developments in terms of Academic Programmes and Policy

3.2.1 Academic programmes

Faculties submitted a number of academic matters to Senate for consideration. These matters include, amongst others, the revision of the structure (curricula) of programmes, the revision, discontinuation and introduction of modules in both undergraduate and postgraduate programmes, amendments to the admission, selection and assessment regulations, and the introduction of new options for existing programmes, as well the introduction of new or discontinuation of programmes. In general, the aim of the changes to programmes was to align such programmes with industry or professional body requirements, Higher Education Qualifications Sub-Framework (HEQSF) requirements, or to ensure that changes are introduced in a way that will maintain a programme's HEQSF-aligned status, or to improve outcomes, throughput and articulation. In considering these matters, Senate ensures the alignment of the academic offering with the UP Strategic Plan. In the main, the changes reflect the University's response to the growing needs, demands and contexts on a national and global level through the introduction of a number of online offerings, its continued strategic focus on postgraduate studies and growing its international student cohort, as well as the optimisation of its overall academic offering. Below is a brief summary of some of the main developments considered and approved by Senate in 2022:

- → Approximately 58 modules were introduced at undergraduate level and 233 at postgraduate level, with the majority of the postgraduate modules arising from the introduction of online programmes;
- → Approximately 99 modules were discontinued at undergraduate level and 14 at postgraduate level;
- → Approximately 19 modules at undergraduate level were revised by, among others, changing or updating the content of modules, changing the prerequisites for modules, changing the credits of modules and revisiting the contact time;
- → Approximately 29 postgraduate programmes were discontinued/deactivated, while 15 postgraduate programmes were introduced;
- → The structure (curricula) of a number of undergraduate and postgraduate programmes was revised to a greater or lesser extent, which, *inter alia*, included the introduction or discontinuation of modules, changing or updating the content of modules, changing the prerequisites for modules, changing the structure and composition of curricula, changing module and/or programme names, changing the contact hours as well as the credits of modules or programmes, etc; and
- → A number of online programmes were approved for submission for accreditation, amongst others, the PGDip in Communication Management, PGDip in Tourism Management, PGDip in Sports, Exercise and Health, PGDip in Project Management, PGDip in Engineering and

Technology Management, and a Higher Certificate in Community-based Theology.

In addition to curricula-specific changes to degree offerings, the following noteworthy changes to offerings in various faculties were approved by Senate:

- → The rationalisation of the degree offering in the Department of Food Sciences by combining the respective Food Management programmes into a single degree with an elective specialisation track;
- → A proposal by the Department of Geography, Geoinformatics and Meteorology to rename the Geoinformatics programme to Geospatial Data Science to align with global trends which seek to include geospatial information and technologies under a wider umbrella to attract a greater number of students to these disciplines; and
- → The introduction of a new specialisation in the Department of Business Management from 2024, namely Critical Accounting, under the existing MPhil Business Management degree programme. The programme targets professional accountants and auditors and engages critically with the role of accountability in society. It will also serve as a pipeline for potential high-quality PhD candidates in accounting, auditing and financial sciences and offer opportunities for inter-departmental collaboration in teaching and research.

3.2.2 Other matters approved by Senate

The following matters were submitted to Senate by the various faculties and Senate Committees for approval:

- → The conferment of Emeritus Professor status on academics as submitted to Senate by the various faculties;
- → Changes to the closing dates for postgraduate applications to, among others, cater for both the South African and the international market, and to align the closing dates for Honours and Master's Coursework applications, conditional admission and registration across all faculties;
- → The introduction of a new admissions process for the 2024 undergraduate intake, which will set a closing date of 30 June for all non-selection programmes and will address the current firstcome first-serve model that results in the University not admitting the best academic candidates in each programme;
- → The establishment of an in-house Foreign Qualification Review process to assist applicants with foreign qualifications who are negatively impacted by the delays at SAQA in issuing their SAQA Certificate of Evaluation and to assist faculties in meeting their international student targets;
- → The implementation of minimum English language test score requirements for international applicants whose first language is not English;
- → Changes to the Policy on Emeritus Professorships to, among others, clarify the retirement age, the exceptional circumstances applying to early retirement and the processes involved in such instances, as well as to clarify the procedures to be followed for the conferment of Emeritus status;
- → Changes to the terms of reference of the Senate Committee for Admission Status to replace the Executive member responsible for the Department of Enrolment and Student Administration

with the Registrar in view of the fact that the Department moved to the Registrar's portfolio on 1 January 2022, as well as changes to the terms of reference of the Faculty Appeals Committee and the Senate Review Committee on Readmissions to, among others, align with the new General Academic Regulations which came into effect in 2022;

- → The Continuous Assessment Guidelines for UPOnline programmes;
- → The Policy on Assessment and the Policy on Curriculum Design and Development;
- → The Policy on Academic Professional Development: Teaching and Learning, which relates to the continuous professional development of academic staff responsible for teaching and learning and is designed to contribute to the enhancement and support of teaching excellence at the University;
- → Changes to the Survey Policy, the Intellectual Property Policy, and the Policy on Organised Student Life;
- → The Institutional Audit Self-Evaluation Report for submission to the Council on Higher Education;
- → The establishment of an African Centre for the Study of the United States at the University of Pretoria (ACSUS-UP), which addresses the absence of academic engagement between Africa and the United States that is far broader than a focus on purely humanistic and social sciences disciplines. The Centre aims to promote disciplinary, interdisciplinary and transdisciplinary knowledge and theory production, research cooperation, policy engagement, cultural contact and business interactions between the US and the African continent in areas of mutual interest that will benefit the University in several important ways;
- → The establishment of a Centre for Asian Studies in Africa (CASA) situated in the Faculty of Humanities, which aims to be a premier African knowledge-creation hub in the field of Asian studies and South African/Asian cooperation to pursue inter-regionalism, scientific enquiry, knowledge-building and global socio-economic change;
- → The establishment of an African Centre for Biosecurity and Disease Risk Assessment in the Faculty of Veterinary Science. The Centre will offer "One Health-One Biosecurity" solutions to address global disease- and animal health-related challenges, contributing to food security in Africa;
- → The establishment of a Biodiscovery Centre residing in the Department of Chemistry in the Faculty of Natural and Agricultural Sciences. UP is actively involved in the discovery of natural products that can be developed as pharmaceuticals, herbal medicines, cosmetics and veterinary products based on South Africa's biodiversity and indigenous knowledge. The Centre will establish UP as a leader in the field of natural product research in South Africa;
- → A number of *ex post facto* changes to faculty undergraduate and postgraduate admission regulations for the 2023 academic year;
- \rightarrow A number of faculty undergraduate and postgraduate admission regulations for the 2024 academic year;
- \rightarrow The academic calendar for 2023;
- → The Faculty of Health Sciences Guidelines for co-authorship with postgraduate students, the use of postgraduate student-generated data or research material, and the related dispute resolution process;
- → The Faculty of Health Sciences Guidelines for the presentation of Master's dissertations and PhD

theses in a publication format;

- → A proposal on a fully online four-week gateway module option for modules with high student failure rates, or modules that serve as prerequisites for all other modules in a particular field; and
- → A number of academic, research and governance policies and regulations/rules, that fall within the ambit of the Office of the Registrar, the Department of Enrolment and Student Administration, the Office of the Vice-Principal: Academic and the Office of the Vice-Principal: Research, Innovation and Postgraduate Education, which had been reviewed and updated.

In addition to the above, Senate noted the reconfiguration of the language departments and affiliated language units within the Faculty of Humanities into a single School of Languages, Literatures and Cultures comprised of four streams: African Languages, Linguistics and Applied Language Studies, English and World Languages.

The third annual Senate Conference was hosted virtually on 17 and 18 February 2022. In keeping with the underlying theme set in previous conferences, the 2022 Senate Conference explored the role of universities in contexts of rapid and multiple changes and major disruptions, with a specific focus on building a human-centred university and related digital transformation, the future of work and Society 5.0. In preparation for the conference, each of the faculties and GIBS prepared conceptually rich video texts that elaborated on their respective analyses of the complex changes facing humanity in general and universities in particular.

Many questions were posed to frame deliberations, but all centred on how the University remains relevant, up-to-date and agile in continuous learning while leveraging the possibilities, prospects and challenges of Society 5.0. The need for partnerships between academia, industry, the private sector and government, and accelerated growth in sustainable networks without borders to ensure that the institution adapts to the complex, interconnected crises, as are captured in the UN Sustainable Development Goals and Africa's Agenda 2063, was emphasised. Emphasis was also placed on the need for universities to focus on opportunities arising from artificial intelligence and digitalisation, and from economic, social and environmental transitions and to develop more balanced, sustainability-oriented, and human-centric approaches.

Four opportunities were outlined that were tied to current strategic priorities and trends in the higher education sector, namely increasing PhDs and focusing on strategic partnerships; curriculum transformation and asserting and celebrating our academic project; entrepreneurship and achieving a 'triangle alliance' of critical knowledge and critical thinking, innovation and entrepreneurship, and lifelong learning, developments in education technology and again, partnerships.

3.3 Teaching and Learning

The University's hybrid teaching and learning model shifts the instructional sequence by assuming three phases in teaching and learning, namely (a) preparation before class, (b) engagement in class, and (c) consolidation after class. This teaching model places UP in the perfect position to develop the skills students need to function effectively in the 4IR. It encourages students to prepare independently for each class and engage and critically discuss issues in class.

As a result of the COVID-19 pandemic, UP had to suspend all contact classes from the beginning of May 2020 and continued with mainly remote teaching and learning until the end of the first semester

in 2022. The University decided to retain the key elements of its hybrid flipped-learning model during this time because this model articulates well with remote teaching and learning. It requires extensive non-classroom-based activities for both lecturers and students. The majority of lecturers and students managed to move with confidence and reasonably seamlessly into the remote teaching and learning mode.

UP combines the latest technologies (see Table 3.1) to support its teaching and learning methodology, and to develop scalable, flexible, interactive, and active learning environments. Aside from the learning management system (LMS), Blackboard Learn (branded as clickUP), the University's technology is embedded in a flipped-learning methodology. This ensures that students come to class prepared, complete pre-class assessments, engage in class, and consolidate their knowledge after class. The University's hybrid teaching and learning model offers students the best of both worlds – online and contact – and is designed to enable them to succeed at university and in life beyond university.

PREPARE before class	ENGAGE in class	CONSOLIDATE after class						
Textbook / eBooks	TurningPoint Clicker App	Assessment platforms						
E-textbook platform	Bb Collaborate	Class recordings						
OER platform		Plagiarism software						
Video platform		Online proctoring						
Courseware authoring tools		ePortfolios						
H5P in-video assessment								
Learning Management System	ı (LMS): clickUP – Blackboarc	Learn & Blackboard Mobile						
Student feedback plat	Student feedback platform: Watermark Course Evaluations & Surveys							
Change managem	Change management and student support platform: EesySoft							

Table 3.1 The technology available to support the University's hybrid learning

UP uses the Blackboard Learn LMS (clickUP) and Blackboard Mobile as fundamental technologies to support hybrid learning. The University uses Blackboard Mobile to enable further student access to their learning material across various devices. The clickUP app lets students view content and participate in courses on their mobile devices. The app is available on iOS and Android mobile devices. Students can thus access content from the BlackBoard (Bb) app, participate in discussions, participate in virtual Blackboard Collaborate classes, and view their grades. EesySoft's change management software was implemented in 2022 to provide contextual support inside clickUP. The effective use of the platform drives digital transformation and adoption through LMS-integrated messaging and technology usage insights.

After a successful pilot in 2021, the University implemented the Cirrus Assessment cloud-based online computer-based testing (CBT) system from the beginning of 2022. This system enables students to write a test on any hardware that possesses internet connection and a browser. The system operates across any browser-enabled device, which opens up the possibility of writing CBT tests on student laptops in an IT lab or lecture hall.

Students are the most important stakeholders of a university. They must have a voice in the quality and value of the learning programmes and the associated resources as a measurement of the success of such resources. UP is committed to improving teaching and learning through dedicated support provided to lecturers and students. Students are essential participants in improving lecturers' teaching practices and, as such, their feedback is of great value to lecturers. The electronic lecturer and module evaluation system, Watermark Course Evaluations & Surveys, enables students to provide feedback on the effectiveness and quality of teaching. The purpose of the teaching evaluation is to assist lecturers in continuously improving their teaching, learning, and assessment practices, as well as the general quality of the modules they teach. Student feedback is crucial to understanding the success and gaps in interventions to facilitate student success. The feedback also allows the academic staff and their line managers to develop and accumulate the portfolio of evidence required for performance management and/or promotion purposes. The procedure and survey underwent a review in 2022.

The University aims to create a more inclusive and supportive environment. It strives to broaden students' access to learning material by using Blackboard Ally to enhance digital content for access and learning and to help build a more inclusive learning environment. Bb Ally was launched in the first semester of 2022. Bb Ally improves the student experience by assisting students in controlling course content with usability, accessibility and quality in mind. In 2022, the Department of African Languages assisted with the Zulu translation, while Bb Ally is also available in Xhosa and will soon be available in Sepedi. In 2022, approximately 72% of the students used alternative formats provided by Bb Ally. In 2022, the Department for Education Innovation piloted ConnectYard, integrated communication software that enables teaching staff to reach students on their devices using their preferred messaging channels: text, social media, or email. This eliminates the need for lecturers to access students' phone numbers and allows them to manage groups outside clickUP. Additionally, the Impact by Instructure change management software was implemented in 2022 to provide contextual support inside clickUP.

The value of access to descriptive and predictive data is demonstrated through UP's capacity to use real-time data about students' teaching and learning activity in the LMS. Access to LMS student engagement data is vital to support institutional student success projects. The effective use of data allows the University to use learning analytics' early alerts to prevent possible future problems, support students effectively, and enhance student success rates. An at-risk student identification system facilitates the early detection and identification of students at risk of failing, leading to timeous interventions and thus ensuring student data – both marks and clickstream data – and drive student success at module and individual levels. Integrating descriptive and predictive data systems into the teaching and learning ecosystem allows UP to personalise student support at scale. The University uses the Pyramid Analytics software package to collect data and develop user-friendly student success dashboards for management and lecturers. Students have access to numerous data reports in clickUP and can set up notifications to receive information when events occur in clickUP.

Improvements made in 2022 to the Blackboard notification settings allow students to track their own progress, for example, if their activity or grade decreases compared to that of their peers. This encourages self-reflection and allows students to assume agency over their learning. Students get push notifications in clickUP, via email, and on the clickUP mobile application when new content is available, including tests, assignments or when they have unread blogs, journals, or discussion entries. Various systems are used to produce reports to identify and support at-risk students, such as HEDA and Blackboard Analytics for Learn. There are several data functions embedded in clickUP (Blackboard).

3.3.1 Community Engagement

Engagement with society and communities flows from the University's teaching and research functions. Community engagement (CE) at UP is about civic responsibility and citizenship. Furthermore, it links the research and teaching skills of our staff and students to the specific needs of individual communities, thus advancing the public good by impacting communities positively. In turn, student life and the attributes developed while at university are enriched through their service-learning and engagement.

CE at UP is predominantly credit-bearing, making it more sustainable as it is programme-based, and has clear outcomes and rigorous assessment. All faculties are involved in CE and community development, although the nature of their involvement varies. Through CE, we demonstrate civic responsibility and citizenship, linking the best research and teaching skills to the specific needs of diverse communities. The communities themselves inform such needs. In a two-way relationship, we partner with stakeholders, valuing and respecting their inherent capacity, beliefs, perspectives and dignity. Our contributions affect the public good role of universities, and at the same time, we draw benefits from the communities' embedded knowledge and ideas. Student life and the attributes developed through service and engagement are enriched, contributing to their holistic development as well-rounded and socially conscious graduates and citizens.

CE is integrated into the curriculum, and is a key aspect of ongoing curriculum transformation. Approximately 300 modules and 15 000 students were involved in CE activities in 2022. In certain undergraduate programmes, obtaining sufficient CE credits is a compulsory requirement. The students work with more than 1 000 community partners in various parts of Pretoria, including Mamelodi, Eersterust, Pretoria North, Pretoria West, the Pretoria Inner City (including Sunnyside and Hatfield), and are involved with more than 3 000 projects annually. CE activities and learning outcomes within specific modules are aligned with students' potential career paths.

Students apply their knowledge and skills to solve problems in partnership with local communities who have identified the problems in their environments. Student learning is highly contextualised and includes elements geared at developing social responsibility.

3.3.2 Student success and support

The FLY acronym, which stands for 'The Finish Line is Yours', is a tagline unique to UP and it serves as a reminder to students that they are responsible for ensuring they complete their studies in the minimum time. This message moves away from the narrative that student success lies largely in the hands of the lecturers and student support staff. FLY@UP is a comprehensive, institution-wide student success awareness initiative. The UP student success life cycle could be described in terms of four phases, namely, a connection phase, an entry phase, a progress phase and a completion phase.



Student success at UP is a multi-stakeholder-driven initiative led by the Vice-Principal: Academic. The stakeholders include Deputy Deans: Teaching and Learning, the Director and deputy directors of relevant professional and support departments such as the Department for Education Innovation, heads of academic departments, and the faculty teaching and learning committees. All faculties and departments at the University are therefore represented at the biannual FLY@UP meetings (chaired by the Vice-Principal: Academic), where critical issues related to student success are discussed and coordinated to eliminate obstacles to academic success at the University. The implementation of this approach at UP entails the integration and close coordination of the faculties and all professional and support departments, which include various initiatives like student recruitment, enrolment, financial aid, student accommodation, academic development, student well-being, marketing, sport and recreation, campus safety, health services, counselling, career services, student advising, student development and leadership, student wellness, and the work done by the Centre for Sexuality, AIDS and Gender (CSA&G).

The first step towards enhancing student success is providing quality teaching and learning opportunities for students to engage actively and authentically with the knowledge, skills, attitudes and values of a particular discipline/field. In addition to the FLY@UP student success awareness campaign, other academic initiatives include orientation of first-year students, the UP Readiness Survey, faculty student advisors (FSAs), tutor support, the HIMs (high-impact modules) project, and the provision of a digital student success support ecosystem to drive and support data-driven student access and success initiatives.

3.3.2.1 Faculty student advisors

The FSAs offer a vital anchoring function and provide a 'safety net' service by advising and/or referring students to targeted support and/or interventions available at UP. The primary function of the FSAs is to provide co-curricular support and development. Specifically, they advise students on module choice, dropping modules, goal setting, adjustment to university life, time management, study methods, stress management, exam preparation, and career exploration. They are extending their reach by running institutional workshops on the above-mentioned topics. Academic advising fosters the development of the whole student towards becoming a self-directed, motivated,

responsible decision-maker and encourages the successful completion of degree requirements and timely graduation. Advisors also manage the online extended orientation module across the various faculties. The University uses IDSC's Learner Case Management (LCM) system to capture the interactions between the FSAs and the students. The LCM system is also used to generate monthly reports on the FSAs' activities. The LMS provides an overview of the student's academic information to be used by the FSAs.

The University promotes an evidence-based approach by developing student success dashboards that FSAs can use for the early identification of at-risk students based on their engagement data and formative assessments. The FSAs are trained to use the dashboards, and regular meetings are held to discuss the practice of reaching out to at-risk students. The University also uses the UP Readiness Survey at the beginning of the academic year to identify first-year students at risk of failing. This allows the FSAs to identify and proactively support students who need academic advising or targeted interventions such as the STARS peer mentorship programme. The FSAs reach out to these students to offer various workshops and support. Information regarding at-risk students is also used to identify and refer students who report financial distress, accommodation challenges, or a recognised disability to the respective support departments.

3.3.2.2 UP readiness survey

The UP Readiness Survey measures students' readiness for university education. Readiness for university education can broadly be defined as a student's level of preparation (financial, social, and academic engagement) to succeed at a higher education institution. The results of the UP Readiness Survey are used to identify first-time first-year students for targeted interventions, such as first-generation students for the STARS peer mentorship programme, or academic advising by the FSAs. In addition, the information can also be used to identify and refer students who reported financial distress, accommodation challenges, data/device challenges, or a recognised disability to the respective support departments. In general, the results are also used to gain a better understanding of the profile of the new cohort of students. The survey captures the following demographic and preentry characteristics: first-generation students, school-related characteristics, financial considerations, housing arrangements, transport opportunities, data and device needs, and the employment status of parents or guardians.

Using the data to make referrals to the mentorship programme and FSAs has proven effective in student retention, experience and success. FSAs proactively used the information received via the Learning Analytics dashboard to invite students for targeted interventions. In 2022, 6 977 first-year students completed the UP Readiness Survey, a participation rate of 81% of first-time first-year students (8 653). Of these students, 32% indicated a need for time-management skills, 30% a need for study skills, and 27% a need for test-taking skills.

3.3.2.3 The orientation of first-year students

The transition from high school to university is a difficult adjustment for first-year students, especially first-generation students and students from poor and disadvantaged communities. Universities must make the transition from school to university as smooth as possible. The Academic Orientation introduces first-year students to all aspects of university life to ensure a smooth transition to the tertiary environment by providing comprehensive support to students to make this

transition. The three-tiered first-year orientation programme won an international award from Anthology, namely the 2022 Catalyst Award: Optimising the Student Experience. At UP, the orientation of first-year students is considered a critical success factor in attaining Goal 1 of the University's strategy, i.e., to increase access, throughput and success. To enhance the impact of the academic orientation week, efforts were made to incorporate each faculty's context by collaborating closely with faculties during the planning stages of the programme. The Academic Orientation Programme (https://www.up.ac.za/orientation) consists of a pre-orientation online module, Academic Orientation Week, and a seven-week online faculty-based extended orientation course.

All students must complete a seven-week online extended orientation programme, University of Pretoria online extended Orientation (UPO), presented in the LMS. The UPO modules are monitored constantly and students are motivated to engage with and complete the modules through regular (weekly) nudges. Assessments in UPO that encourage student engagement in the module, are concluded within a few weeks of delivering the seven-week content. The resources and tools contained in UPO, however, remain available to students throughout the academic year. This provides the first-year students with access to academic support and consultation with FSAs who are the facilitators of UPO. FSAs are available to address academic challenges throughout the year.

In 2022, a total of 82.5% of students registered during the orientation period, attended the academic orientation week and reported that they feel welcome, know where to find support, and they are ready for the academic demands of university life. A total of 5 645 students completed the pre-orientation and 5 459 are now registered UP students. After completing the pre-orientation, 561 students reported that they are not comfortable using a computer, 3 814 reported that they are moderately comfortable using a computer, and 3 451 reported that they are very comfortable using a computer.

3.3.2.4 Students' digital literacy skills: academic information management (AIM)

The Academic Information Management modules, AIM 101 and AIM 102, are compulsory semester modules assisting first-year students in improving their proficiency using the Microsoft Office Suite, a bundle of software developed by Microsoft (Word, Excel, Access, PowerPoint) over two semesters. Additional skills taught, include using electronic Library Catalogue and electronic Library Databases to access electronic resources necessary for students to do online research.

3.3.2.5 clickUP course for first-year students

The aim of the clickUP introductory online self-paced course is to familiarise all new students with clickUP (Blackboard, the University's LMS). We encourage students to register as early as possible in the year to complete the course. The course has built-in exercises that simulate activities such as uploading assignment to Turnitin. Students can also work through the resources available on the clickUP Student Help Site, both before and after they are formally registered. Some of the valuable resources on the clickUP Student Help Site include instructions on how to log in to clickUP and navigate the system.

3.3.3 Acknowledging and rewarding sustained high performance and innovation in teaching

The University awarded its annual Teaching Excellence and Community Engagement Awards in 2022 to the following winners:

- → **Group award for Teaching Excellence**: Prof Tania Hanekom from the Department of Electrical, Electronic and Computer Engineering
- → Individual Teaching Excellence Award: Dr Caren Combrinck from the Department of Architecture
- → **Group award for Community Engagement**: Dr Gerna Wessels from the Department of Social Work and Criminology

3.3.4 Student success

Table 3.2 provides student success data from 2018 to 2022. The full set of 2022 data will be available in the audited HEMIS submission later this semester. The overall module pass rate (MPP) for UP has increased from 82.90% to 85.70% between 2018 and 2022, with a peak recorded at 88.20% in 2020. The examination pass rate (EPP) has increased from 80.80% to 85.80% between 2018 and 2022, with a peak recorded at 87.40% in 2020. However, there was a decline in the MPP and EPP in 2022 compared to 2021.

	Term	Number of modules	МРР	EPP	DP	АР
	2018	2 083	82.90%	80.80%	7.30%	1.40%
	2019	2 137	83.90%	82.10%	6.60%	1.40%
Grand Total	2020	2 277	88.60%	87.40%	4.60%	1.50%
	2021	2 282	88.80%	86.10%	5.80%	1.50%
	2022	2 344	85.50%	85.40%	4.80%	1.40%

Table 3.2 Average undergraduate module pass rates for contact students, 2018–2022

KEY:

MPP = module pass percentage: Proportion of students who passed the examination in relation to the total number of initial registrations expressed as a percentage.

EPP = examination pass percentage: Proportion of students who passed the examination in relation to the number of students who wrote the examination, expressed as a percentage.

DP = drop-out percentage: Proportion of students who dropped out (cancellations PLUS exclusions) in relation to the total number of student registrations, expressed as a percentage.

AP = absenteeism percentage: Proportion of students who were absent from the examination in relation to the number of students admitted to the examination, expressed as a percentage.

3.3.5 Graduate outputs

A total of 13 555 diplomas and degrees were awarded in 2022, a decrease of 38 graduates compared to 2021 (13 593). The total number of master's graduates in 2022 was 1 822 compared to 2 046 in 2021 and that of doctoral graduates was 333 compared to 367 in 2021. In 2021, the number of distance and online education graduates was 657, which increased to 993 in 2022. There was a

decrease of 15 graduates in undergraduate contact programmes, from 7 588 in 2021 to 7 573 in 2022, while the total number of graduates in postgraduate programmes decreased by 125 from 6 005 in 2021 to 5 880 in 2022.

3.4 Research

The 2022 academic year saw life return to our campuses as students resumed contact lessons after two years of virtual learning. The restrictions of 2020 and 2021 provided ample opportunity to fast-track many communication innovations, which, when matched with the resumption of contact learning, has moved UP's academic offering forward substantially. UP has always been characterised by a spirit of transdisciplinary and international cooperation and, to this end, some notable initiatives were launched.

The Sustainable Development Solutions Network (SDSN) South Africa was officially launched in March 2022 at the University's Future Africa Campus. Hosted by the Albert Luthuli Leadership Institute at UP, the SDSN South Africa Network is chaired by Professor Tawana Kupe, Vice-Chancellor and Principal of the University.

The UP's Mammal Research Institute Whale Unit and World Wide Fund for Nature (WWF) South Africa have teamed up to support research on southern right whales in response to warming oceans and changes to ocean processes affecting the number of whales visiting South Africa's shores.

The University launched the Pan African Cancer Research Institute (PACRI) to transform the fight against cancer in Africa. The founding Director of PACRI is Professor Zodwa Dlamini, a Professor of Molecular Oncology at UP. Prof Dlamini is also the Scientific Director of the South African Medical Research Council's (SAMRC) Precision Oncology Research Unit and holds the Department of Science and Innovation (DSI)-National Research Foundation (NRF) South African Research Chair Initiative (SARChI) Chair in Precision Oncology and Cancer Prevention. Funded by UP, the SAMRC and the NRF, PACRI consolidates prevailing cancer research efforts and resources to provide a platform for research growth and development throughout South Africa and beyond.

3.4.1 Notable Achievements

UP has an excellent reputation for world-class research. The University continues to focus on becoming a leading research-intensive institution known for cutting-edge research, excellence and innovation. Below is a small selection that is illustrative of the breadth, depth and excellence of our research.

Detection and genome characterization of the Middelburg virus

An excellent example of the research and education interface was provided by our master's graduate, Isabel Fourie, who, along with Dr June Williams (Department of Paraclinical Sciences, Section of Pathology, Faculty of Veterinary Science) and Professor Marietjie Venter, Head of the Zoonotic, Arbo- and Respiratory Virus Programme at UP's Department of Medical Virology, combined with a high-level team of local and international researchers to detect and characterise the genome of strains of the old-world Middelburg virus. Ms Fourie was the lead author of the resulting paper, published in *PLOS Neglected Tropical Diseases*.

Effects of grazing on deserts

Prof Peter le Roux, from the Department of Plant and Soil Sciences, and Prof Thulani Makhalanyane, DSI/NRF SARChI Chair in the Department of Biochemistry, Genetics and Microbiology, led the South African component of a ground-breaking multidisciplinary study on the effects of grazing in deserts. The first-ever global field assessment of the ecological impacts of grazing in drylands was published in *Science*, and was the product of global cooperation.

Investigating termite and microbial wood discovery and decay

Extraordinary Professor Catherine Parr and PhD student Katherine Bunney of the Department of Zoology and Entomology joined over a hundred collaborators from around the world in an international study led by the University of Miami to investigate termite and microbial wood discovery and decay. The research outcomes were published in the journal *Science*. The UP team ran field experiments in a relatively wet savanna near Hoedspruit and further north in a much more arid savanna in the Nwanedi Nature Reserve, using wood blocks in decomposition bags.

3.4.1.1 Research capacity and productivity

As part of the UP 2025 Strategy, the University has developed institutional performance indicators to evaluate and monitor UP's progress. The indicators related to research and postgraduate education are shown in Table 3.3 below.

Indicators	2018	2019	2020	2021	2022
Staff with PhDs	67.06%	67.68%	68.80%	70.40%	70.90%
NRF-rated academic staff	507	528	545	595	615
Accredited publication units per academic FTE staff	1.11	1	1.1	1.75	1.09
Weighted M and D graduate output per academic FTE staff	1.56	1.97	1.71	1.33	1.15
Master's graduates	1993	2008	1801	2046	1822
Doctoral graduates	427	399	374	367	333
PhD students enrolled	2307	2375	2429	2537	2586
Master's students enrolled	6116	7088	6293	6318	6190
Diversity profile: % black PG students	61.50%	66.75%	65.46%	71.18%	73.56%
Postdoctoral fellows	232	221	263	274	282
International postdoctoral fellows	164	98	161	159	175
International academic staff	180	203	211	222	245

Table 3.3 Key areas of research capacity and performance

Source: Department of Research and Innovation (DRI) and HEMIS

UP continues to attain a high proportion of academic staff with a doctorate (70.90% in 2022). Progress has also been maintained with NRF-rated academic staff, master's and doctoral enrolments, the number of international postdoctoral fellows and international academic staff.

UP's research productivity, measured by peer-reviewed research publications and creative and innovation output units for which subsidy is earned, has consistently been in the top four of all South African universities.

The 2017 DHET Policy for Creative and Innovation Outputs was implemented in 2019, and UP has had the highest number of approved units for innovations for the 2020 and 2021 submissions, at 38.3% of all sector units in 2020 and similarly 32.69% of all sector units in 2021.

Output Type	2018	2019	2020	2021	2022*
Journals	1702.53	1682.42	1749.62	2042.94	1902.88
Proceedings	85.20	82.2	49.09	79.52	84.56
Books and book chapters	266.80	296.0	301.06	248.21	356.57
PUBLICATION UNIT TOTALS:	2054.53	2060.62	2099.77	2370.67	2344.01
Creative outputs	-	13.31	35.37	19.25	
Innovations	-	15	21.11	14	

Table 3.4 UP research output units per publication type, 2018-2022

Source: DRI

** Provisional until completion of the 2023 audit and DHET review. The creative outputs and innovations for the reporting year will only be submitted in September 2023

3.4.1.2 Leading researchers, impact and visibility

The University is rated among the top 1% globally in 14 of the 22 Essential Science Indicator (ESI) fields. UP was the only university in South Africa to feature in Economics and Business. Furthermore, UP researchers produced most documents within Economics and Business, Engineering, Microbiology and Plant and Animal Science within South Africa.

The full list of ESI research fields in which UP is ranked appears in Table 3.5 below.

ESI subject fields		Num	ber of p	apers		Number o			er of citations		Average citations			s per pa	per
Year	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Agricultural Sciences	580	628	686	742	799	3995	4785	5859	6903	8235	6.89	7.62	8.54	9.3	10.31
Biology & Biochemistry		480	520	577	644		6883	7644	8970	11299		14.34	14.7	15.55	17.55
Chemistry				790	878				9504	12418				12.03	14.14
Clinical Medicine	1306	1453	1622	1857	2162	13740	18374	23901	28825	35321	10.52	12.65	14.74	15.52	16.34
Economics & Business			828	934	1047			5302	7919	11694			6.4	8.48	11.17
Engineering	1157	1253	1388	1526	1700	8956	11705	15610	19027	24048	7.76	9.34	11.25	12.47	14.15
Environment / Ecology	999	1134	1229	1403	1620	12556	15983	18073	22598	28638	12.57	14.09	14.71	16.11	17.68
Geosciences					614					7018					11.43
Immunology	373	401	446	493	566	5070	6021	6884	8090	10382	13.59	15.01	15.43	16.41	18.34
Microbiology	508	555	628	718	808	6290	7425	9202	11149	14152	12.38	13.38	14.65	15.53	17.51
Molecular Biology & Genetics				391	422				17483	19966				44.71	47.31
Pharmacology & Toxicology				346	385				4277	5774				12.36	15
Plant & Animal Science	3241	3365	3510	3647	3720	30585	34944	39589	48115	56502	9.44	10.38	11.28	13.19	15.19
Social Sciences, General	1383	1491	1611	1819	1996	5319	6322	7299	8655	10862	3.85	4.24	4.53	4.76	5.44

Table 3.5 UP's international standing in ESI knowledge fields

*Source: Department of Library Services, ESI (InCites), 2022: Jan 2023

UP has three researchers ranked in the top 1% by ESI worldwide. They are:

- → Prof Rangan Gupta in Economics and Business;
- → Prof Mike J Wingfield in Plant and Animal Sciences; and
- → Prof Yves Van der Peer in Cross-field (Ghent University Belgium with a secondary affiliation with UP).

Researchers are selected for their exceptional influence and performance in one or more of the 21 research fields or across several fields. The methodology assesses the number of highly cited papers and citations for 2012 to 2022 by threshold per subject.

It is possible to use ESI statistics to identify the top 1% of scientists and published articles internationally based on citations. As of January 2023, 265 UP-published papers were among these top papers worldwide, spread over 20 of the 22 ESI subject fields. UP continues to dominate the subject category of Plant and Animal Sciences with 78 top papers.

3.4.1.3 World rankings

Higher education institutions are ranked globally on the basis of various factors, including research performance and impact. International diversity and other indicators such as academic reputation and graduate employability also contribute to the various ranking systems. UP's interest in university rankings is informed primarily by its overarching vision of becoming a global research player and secondly, to encourage UP researchers to embrace important research practices such as collaborative research and co-authorship with international partners. While rankings may fluctuate from year to year, and between ranking systems, UP's focus on quality teaching, learning and research remains steadfast.

Table 3.6 shows UP has remained stable in its rankings over the past five years, with a decline in 2022 in the Quacquarelli Symonds (QS) World University Rankings.

Ranking system	2018	2019	2020	2021	2022
QS	561-570	551-560	561-570	561-570	601-650
THE	601-800	601-800	601-800	601-800	601-800
ARWU	401-500	401-500	401-500	401-500	401-500
URAP	401-500	401-500	401-500	401-500	459

Table 3.6 UP's performance in world university rankings

Source: ARWU 2023; QS 2023; THE 2023; URAP

In 2022, UP remained highly ranked in many subjects, including being in the top 100 globally in areas like Law, Mineral and Mining Engineering and Veterinary Science. It is still the case that UP is named best South African university at which to study engineering, technology, and computer science.

Our best performance is also in the impact and sustainability rankings run by THE and QS, where we are ranked joint second with the University of Cape Town (UCT). Some highlights of our 2022 performance appear below.

THE Subject Rankings

The Times Higher Education (THE) Subject Rankings for 2022 ranked UP in 11 subject fields (Table 3.7). The performance of most subjects remained stable over this period, with a noticeable success from Law, returning to the top 100 and its highest ranking. UP was also ranked first in South Africa for Law.

	-				
Subject	2018	2019	2020	2021	2022
rts & Humanities	251-301	251-301	301-400	301-400	301-400
usiness & Economics		301-400	301-400	301-400	401-500
linical, Pre-clinical & Health	401-500	401-500	501-600	501-600	601+
omputer Science			501-600	501-600	
ducation		301-400	401-500	401-500	501+
ngineering			601-800	601-800	
aw	92	76	101-125	101-125	60
fe Sciences	301-400	301-400	301-400	301-400	301-400
hysical Sciences		501-600	601-800	601-800	601-800
sychology		401-500	401-500	401-500	501+
ocial Sciences		401-500	401-500	401-500	501-600
sychology		401-500	401-500	401-500	

Table 3.7 UP's THE ranking by subject

Source: THE 2023

THE Impact Rankings

These rankings, released in May 2022, named UP as South Africa's second-best (joint second) and Africa's third-best (joint third) university. The rankings are based on the 17 United Nations Sustainable Development Goals (SDGs), which are designed to address the most serious and critical global challenges in the world. UP is among the Top 50 universities in the world on SDG 8: Decent Work and Economic Growth (number 44) and SDG 15: Life on Land (number 30). It falls in the Top 100 on SDG 9: Industry, Innovation and Infrastructure (number 88) and SDG 17: Partnership for the Goals (number 86). The University's performance in these rankings is shown in Table 3.8.

Table 3.8 UP's THE Impact Rankings

Sustainable Development Goal	2020	2021	2022
SDG2: Zero Hunger	-	201-300	-
SDG3: Good Health and Wellbeing	101-200	201-300	201-300
SDG4: Quality Education	96	201-300	201-300
SDG8: Decent Work and Economic Growth	-	101-200	44
SDG9: Industry, Innovation and Infrastructure	94	101-200	88
SDG 10: Reduced Inequalities	-	-	101-200
SDG13: Climate Action	-	301-400	-
SDG15: Life on Land	-	76	30
SDG16: Peace, Justice and Strong Institutions	68	201-300	101-200
SDG17: Partnership for the Goals	101–200	101-200	86
UP OVERALL	101-200	201-300	101-200

Source: THE 2022

2022 THE Reputation Ranking

UP significantly improved its performance in the latest THE World Reputation Rankings compared to the 2021 edition. Globally, UP is ranked 382 in overall reputation (see Table 3.9). It also improved its research reputation, coming in at position 385 (581 in 2021), as well as reaching 339 in teaching reputation (461 in 2021). This is UP's best performance over the past five years.

Metrics	2020	2021	2022
Teaching	550	461	339
Research	491	581	385
UP OVERALL	506	514	382

Source: THE 2022

2023 QS Sustainability Rankings

UP is one of only three universities in Africa that has been ranked in the top 200 globally in the 2023 QS Sustainability Rankings (Table 3.10), which were released in October 2022. UP was ranked second in South Africa and Africa, and in the 171-180 band globally. The QS Sustainability Rankings provide a framework to show how universities are responding to the world's environmental, social and governance challenges. In the two ranking categories, UP was ranked first in Africa for Environmental Impact (139 globally) and third in Africa for Social impact (161 globally).

Table 3.10 UP's QS Sustainability Rankings

Metric	Domestic Rank	Global Rank
Social Impact	3	161
Employment and Opportunities	3	173
Equality	2	207
Impact of Education	4	267
Knowledge Exchange	3	136
Life Quality	5	273
Environmental Impact	1	139
Sustainable Education	1	136
Sustainable Institutions	1	59
Sustainable Research	6	394
Overall	2	171-180

The University's Gordon Institute of Business Science (GIBS) was once again ranked top in South Africa in the UK Financial Times rankings for their Executive MBA programme. The only African business school in the paper's annual Executive MBA Ranking, GIBS has moved to position 74 for the modular and part-time executive MBA, climbing 13 places. More information on the University's performance in university rankings is provided in Section 7.7 of the Vice-Chancellor's Report.

3.4.2 New research developments

The following research initiatives represent a few highlights from the reporting period.

BWS plus - Cognitive Geomatics

Cognitive Geomatics is the science of digital teaching to create awareness of intercultural differences in the sense of place. BWS Plus is a project of the Baden-Württemberg-STIPENDIUM for students, a programme of the Baden-Württemberg Stiftung. The project represents a long-term cooperation between UP, the Karlsruhe University of Applied Sciences (HKA) in Germany and the University of Nairobi in Kenya. The project will widen the thematic discourse to be more interdisciplinary in nature.

Centres for International Study

2022 saw the launch of two new centres. The African Centre for the Study of the United States, University of Pretoria (ACSUS-UP) is a local structure and network centre with an inter- and transdisciplinary scope. The ACSUS-UP promotes scholarly research and exchanges, policy engagement, business interactions and cultural contact between African and American universities and epistemic communities.

The Centre for Asian Studies in Africa (CASA) is a new initiative producing knowledge on Asia and Afro-Asian connections in South Africa and on the African continent.

Biodiscovery Centre

UP is at the forefront of biodiscovery research. The Faculty of Natural and Agricultural Sciences has established a Biodiscovery Centre, which coordinates and merges biodiscovery activities across the University and with key collaborators and partners. Funding from the Department of Science and Innovation (DSI) has been secured and will be used to create a library of natural products in Africa. Significant progress has been made in this regard. The main focus of the Biodiscovery group is to create a unique repository of natural products for the benefit of the country and the continent.

African Centre for Biosecurity and Disease Risk Assessment

A first in Africa, the African Centre for Biosecurity and Disease Risk Assessment is a dedicated Centre hosted in the Faculty of Veterinary Science with the primary research objective of assessing the risks associated with animal diseases. This includes developing and testing surveillance, diagnostic and control models to gauge the emergence, progression and spread of animal health-related risks that threaten Africa's wildlife, agriculture, food security, economy and public health.

3.4.3 New and renewed research chairs

UP had a total of 51 active chairs in 2022, including 32 industry-funded research chairs and 19 active DSI-NRF SARChI chairs.

New chairs

Four UP academics were awarded co-funded chairs under the South African Research Chairs Initiative (SARChI), bringing the total number of chairs awarded to the University to 20:

- → Chair in Machine Learning for Sustainable Development: awarded to artificial intelligence specialist Prof Nelishia Pillay of the Department of Computer Science;
- → Chair in Precision Oncology and Cancer Prevention: awarded to Prof Zodwa Dlamini, inaugural scientific director of UP's Pan African Cancer Research Institute;
- → Chair in Marine Microbiomics: awarded to Prof Thulani Makhalanyane of the Department of Biochemistry, Genetics and Microbiology; and
- → Chair in the Political Economy of Migration in the Southern African Development Community (SADC): awarded to Prof Chris Changwe Nshimbi, acting director of UP's Institute for Strategic and Political Affairs.

3.4.4 Collaboration and partnerships

International cooperation and collaboration remain essential to UP's development and are integral to our five-year strategy. This encourages a global perspective for research while also exposing students and researchers to international expertise and resources. Simultaneously, it enables regional southern African issues to be highlighted globally.

3.4.4.1 International partnerships and collaboration

UP strives to position itself as a leading research-intensive university in Africa recognised internationally for its quality, relevance and impact. Internationalisation is a key driver for realising this vision.

UP currently has 228 active formal partnerships. In 2022, UP signed 27 agreements with its partners globally, which included renewals. Of the new agreements, 16 are with European partners, four in Africa, one in Asia/Pacific, and four in North America.

In 2020, UP approved the Africa Global University Project (AGUP), a strategic and transformative initiative that seeks to revitalise the University's collective partnerships approach that focuses on building an institution that is firmly internationally recognised for research excellence and highquality engaged scholarship, whilst contributing to social and economic development in South Africa, Africa and the world. AGUP uses a systematic approach to inclusive partnerships with multiple stakeholders and networks across all the continents.

Further, the AGUP initiative aims to strengthen UP's participation in Networks such as the African Research Universities Alliance (ARUA), the Australia-Africa Universities Network, the Association of Africa Universities (AAU), the Worldwide Universities Network (WUN), the Austria-Africa University Network (AfriUniNet), the Alliance for African Partnerships, United States-South Africa Higher Education Network Project and many other Africa-focused initiatives to influence the collaborative development of higher education and research in Africa and globally.

UP is an active member and the South African coordinator of the South Africa-Sweden Universities Forum (SASUF). In 2022, the SASUF 2030 programme resumed, and two events were held - one at the University of Mpumalanga and the second, a virtual meeting hosted by UP. The first call for collaborative proposals was launched in September 2022.

This affirms our leadership and commitment to building capacity in Africa and to accelerating and scaling impact for achieving the African Union's Agenda 2063, as well as the Sustainable

Development Goals (SDGs) of the United Nations. These relationships will be further expanded with the appointment of a Senate Committee for Internationalisation and Global Engagement Strategy to guide and support future collaborations.

3.4.4.2 Staff and student exchanges

Some highlights related to staff and student exchange include:

- → UP hosted 92 short-stay mobility students in the 2022 academic year (17 in the first semester and 75 in the second semester);
- → Three UP students were nominated to go to Leiden University, Tilburg University and Tokyo University of Foreign Studies;
- \rightarrow A UP Law student was awarded the prestigious Abe Bailey travel bursary;
- → 98 students, including 6 UP students, were admitted to the 2022 Collaborative Masters in Agricultural and Applied Economics CMAAE/SFSE Group. In 2022, the Faculty of Natural and Agricultural Sciences hosted the programme online. The other participating higher education institutions are Haramaya University (Ethiopia); University of Nairobi and Egerton University (Kenya); Sokoine University of Agriculture (Tanzania); Makerere University (Uganda); Lilongwe University of Agriculture and Natural Resources (Malawi); and University of Zimbabwe (Zimbabwe);
- → Exchange students were hosted in various clinical programmes at the Faculties of Health and Veterinary Sciences; and
- → UP currently has 36 institutional partners under the European Union's Erasmus+ programme. In the reporting year, 28 UP representatives (10 academics, 11 professional services staff members and 7 students) benefited from the international mobility opportunities presented by funded Erasmus+ projects, and UP hosted 16 incoming delegates (3 academics, 5 professional services staff and 8 students).

3.4.4.3 UP-funded programmes promoting internationalisation

Through various programmes, UP supports its academic staff and postgraduate students in international activities, such as participation in international conferences or research visits to collaborators and strategic partners. The programmes are the Vice-Principal's Congress Funding Programme, Visiting Professors Programme, Staff Travel Abroad Programme and the Postgraduate Study Abroad Programme.

The number of beneficiaries who received internal grants in 2022 per programme was as follows:

- → The Vice-Principal's Congress Funding Programme (outbound) 61 staff members supported to the amount of R2.9 million;
- → Staff Travel Abroad Programme (inbound/outbound) 18 staff supported to the amount of R896 000; and
- → Postgraduate Study Abroad Programme 16 doctoral students supported to the amount of R828 000.

3.4.4.4 Student exchange agreements

In 2022, UP signed 20 student exchange agreements to ensure strategic engagement with international partners (Europe - 17, Asia - 2 and USA - 1). These were:

- → Friedrich Schiller University Jena, Germany;
- → The Gesellschaft für Bildung und Forschung in Europa (GBFE);
- → IAE School of Management France;
- → Tokyo University of Foreign Studies (TUFS);
- → Massachusetts Institute of Technology (MIT);
- → The University of Oslo, Norway;
- → Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands;
- → Singapore Management University;
- → WHU-Otto Beisheim School of Management (WHU), Dusseldorf, Germany;
- → Ecole Nationale Supérieure Mines Télécom Lille Douai (IMT Lille Douai), France;
- → Ghent University, Belgium;
- → Friedrich Schiller University of Jena, Germany;
- → Geneva Business School;
- → Groningen University, The Netherlands;
- → Karlstad, Sweden;
- → Sciences Po Lyon, France;
- → Tübingen University, Germany;
- → University of Amsterdam, The Netherlands;
- \rightarrow University of Clermont Auvergne (UCA), France; and
- → Zürich University of Applied Sciences, Switzerland.

3.4.4.5 Joint degree agreements

UP had 14 active joint degrees in 2022, with seven students registered for joint degrees in the 2022 academic year. While four joint degree agreements have expired, a total of four new joint degree agreements were finalised. These were with Radboud University, University of Amsterdam, Kings College London, and Coventry University.

3.4.4.6 Collaboration and co-authorship

International collaboration remains a core strategic focus for the University. While Europe and North America (see Table 3.11) remain the most active areas for collaboration, both in terms of the number of institutions collaborated with and the research output of those partnerships, UP continues to strengthen relationships with other parts of the world.

Region	Collaborating institutions	Co-authored publications
Africa	540	7558
Asia Pacific	1339	2901
Europe	2020	5295
Middle East	349	958
North America	1004	3466
South America	310	603
TOTAL	5556	20781

Table 3.11 The regional spread of UP's co-authored publications, 2017–2022

Source: SciVal, 10 January 2023 (Please note that the totals are not a sum of the regional totals, because some publications were published in collaboration with researchers from more than one continent)

Table 3.12 shows the top 20 institutions internationally with whom UP has co-authored papers between 2017 and 2022, excluding institutions in South Africa, and the cumulative citations over a five-year period.

Table 3.12 UP co-authored publications: top 20 collaborating institutions (excluding South African universities), 2017–2022

Top 20 institutions	Country	Co-authored	Citations	Citation per
	country	publications		publication
Centre National de la Recherche Scientifique	France	384	13480	35.1
Ghent University	Belgium	345	9956	28.9
University of Western Australia	Australia	268	6097	22.8
Harvard University	United States	235	14033	59.7
University of Oxford	United Kingdom	226	9614	42.5
University of Queensland	Australia	215	5714	26.6
Utrecht University	Netherlands	185	7174	38.8
Spanish National Research Council (CSIC)	Spain	183	10683	58.4
Columbia University	Columbia	179	6228	34.8
University of Cambridge	United Kingdom	179	6605	36.9
Universite de Montpellier	France	175	5769	33
Chinese Academy of Sciences	China	165	9255	56.1
Institut National de la Recherche		164	4832	29.5
Agronomique (INRAE)	France	104	4032	29.5
University College London	United Kingdom	160	9155	57.2
University of Amsterdam	Netherlands	159	8596	54.1
Institut de Recherche pour le Développement	France	153	6202	40.5
University of Washington	United States	153	8299	54.2
Centre de coopération internationale en				
recherche agronomique pour le	France	147	2380	16.2
développement				
University of Edinburgh	United Kingdom	145	6108	42.1
University of Toronto	Canada	141	10850	77

Source: SciVal, (last index update, Jan 2023)

3.4.5 Partnerships with industry and government

UP's strong partnerships with industry and government are reflected in the number of research chairs at UP that are funded by industry. In 2022, UP had 32 industry-funded chairs and 18 SARChI chairs, underscoring the emphasis on the impact and relevance of research programmes at UP and the training of students.

3.4.5.1 Commercialisation of research

It is stipulated in the Intellectual Property Rights from Publicly Financed Research and Development Act 51 of 2008, that publicly funded research and development should be identified, protected and commercialised for socio-economic benefit. Hence, commercialisation remains an important part of the University's strategic focus. The University's performance with regard to patents, trademarks, licenses, and start-up businesses is reflected in Table 3.13 below.

	2018	2019	2020	2021	2022
New invention disclosures	17	15	10	16	15
Number of SA patents filed	13	14	15	13	7
Number of SA patents granted	6	6	2	7	7
Number of international patents filed	34	13	21	30	12
Number of international patents granted	11	15	10	5	6
New trademarks	5	2	1	3	1
New licenses signed	3	3	3	2	1
New start-up businesses	0	0	1	1	0

Table 3.13 UP intellectual property activity, 2018–2022

Source: DRI

The University was awarded R2 540 000 of Technology Innovation Agency (TIA) seed funding in 2022 for four technology development projects set to commence in 2023.

In relation to licensing, UP and the CSIR concluded a license agreement with a major industry player in the animal vaccine market. The name of the company cannot be disclosed due to confidentiality. This transaction is important since the company will produce and commercialise a cattle tick vaccine. A number of other UP technologies have attracted noteworthy licensing interest from industry, including intellectual property, such as Asthma Grid, Hepatocellular Carcinoma Cell Lines, and a Non-Invasive Method for Malaria Detection. An existing licensee has expressed an interest in a buy-out of the UP intellectual property, and this is currently undergoing IP valuation.

3.4.6 Graduate development

3.4.6.1 Postgraduate students

Since 2018, the FlyHigher@UP programme has contributed to enhanced recruitment of postgraduate students, shortened postgraduate degree completion periods, increased throughput rates, ensured an enjoyable student experience at UP, and enhanced the quality of graduates produced by the University.

3.4.6.2 Postgraduate recruitment and enrolment

Postgraduate programmes are central to the achievement of the University's strategic goals, especially those focused on enhancing access to higher education, research activities, societal impact and the international profile of the University. As shown in Table 3.14, postgraduate enrolments have remained stable for both PhD and master's programmes.

	2018	2019	2020	2021	2022
Master's degrees	6 116	6 239	6 248	6 318	6 190
Doctoral degrees	2 307	2 375	2 411	2 537	2 586

Table 3.14 UP master's and doctoral enrolment, 2018–2022

Source: DIP

3.4.6.3 Overall enrolment of postgraduate contact students in 2022

Overall, 16 994 postgraduate students were enrolled at UP in 2022 (see Table 3.15). UP's enrolment of postgraduate students reflects a sound gender balance, with 56.38% of contact postgraduate enrolments coming from female students. Most postgraduate students are black, constituting 67.89% of all postgraduate contact students.

Table 3.15 Undergraduate and postgraduate enrolment (contact, distance and online students), 2022

Cturbu Louiol		Ra	ace			Gender	
Study Level	Black	White	Unknown	Total	Male	Female	Unknown
Undergraduate	23 751	13 307	17	37 075	15 117	21 858	100
Percentage of total	64.06%	35.89%	0.05%	100.00%	40.77%	58.96%	0.27%
Postgraduate	12 484	4 494	16	16 994	6 728	10 249	17
Percentage of total	73.46%	26.44%	0.09%	100.00%	39.59%	60.31%	0.10%
Occasional	256	128	13	397	186	211	0
Percentage of total	64.48%	32.24%	3.27%	100.00%	46.85%	53.15%	0.00%
GRAND TOTAL	36 491	17 929	46	54 466	22 031	32 318	117
% of total	67.00%	32.92%	0.08%	100.00%	40.45%	59.34%	0.21%

Source: HEMIS

3.4.6.4 Financial support for postgraduate students

UP provides bursaries to academically deserving students who are in financial need in order to enable them to pursue postgraduate studies. Table 3.16 shows the numbers of honours, master's and doctoral students who received UP-funded bursaries in 2022.

Table 3.16 Number of postgraduate s	tudents provided with UP financial	support in 2022
Postgraduate level	Number of students funded	

Postgraduate level	Number of students funded
Doctoral students	721
Master's students	630
Honours students	783
Total	2 134

Source: DRI (March 2022)

3.4.6.5 Postdoctoral research fellowships

The UP Postdoctoral Research Fellowships Programme provides a platform for postdoctoral fellows to conduct research under the leadership of UP academic researchers. As part of research teams spread across different faculties or research institutes, postdoctoral fellows play an important role in various research activities that contribute towards making UP one of the leading research-intensive universities globally. Table 3.17 shows that the number of postdoctoral research fellows at UP has steadily increased over the years.

Category	2018	2019	2020	2021	2022
UP-funded postdocs	47	26	60	85	67
Senior UP-funded postdocs	22	21	28	9	7
UP VC-funded postdocs	10	4	0	0	0
UP co-funded postdocs	0	0	0	0	25
Claude Leon Foundation	7	4	2	3	1
NRF-funded	87	91	64	56	62
Faculty strategic funds	27	30	19	3	33
Mellon Foundation	7	4	8	7	7
CSIR	3	2	3	1	2
AESOP	1	0	0	0	0
South African Reserve Bank	3	4	4	4	3
Future Africa	0	0	14	4	0
Other externally funded	39	79	62	111	84
Total	253	264	264	283	295

Table 3.17 Sources of funding for postdoctoral fellows from 2018–2022

Source: DRI

In line with the goal of enhancing the University's international profile, UP attracts postdoctoral research fellows from several countries across the globe. Table 3.18 shows that international postdoctoral research fellows are in the majority at UP.

Table 3.18 Number of international and SA postdoctoral fellows at UP, 2018–2022

	2018	2019	2020	2021	2022
International	164	160	161	164	175
International as % of total	64.80%	60.60%	61.00%	57.90%	59.3%
South African	89	104	103	119	120
South Africa as % of total	35.20%	39.40%	39.00%	42%	40.7%
Total	253	264	264	283	295

Source: DRI

The University continues to achieve a gender balance in the postdoctoral fellowship programme. In 2022, 49.5% of the postdoctoral research fellows at UP were female, and 50.5% were male. Table 3.19 shows the distribution of the University's postdoctoral research fellows by gender.

	2018	2019	2020	2021	2022
Male	135	146	140	145	149
% of total	53.40%	55.30%	53.00%	51.20%	50.5%
Female	118	118	124	138	146
% of total	46.60%	44.70%	47%	48.80%	49.5%
Total	253	264	264	283	295

 Table 3.19 Gender profile of UP postdoctoral fellows, 2018–2022

Source: DRI

3.4.7 Awards and recognition

There are numerous awards and accolades that academic staff and students at UP receive in recognition of their achievements, with some of these highlighted in the reports of the Chairperson of Council and the Vice-Chancellor and Principal. The focus here is on the internal research awards celebrated at UP's annual Academic Achievers Awards gala event.

3.4.7.1 Internal research awards

The Academic Achievers Awards celebrate and honour academic achievers and researchers for their scholarly contributions. There are five categories of UP awards that pertain to research and postgraduate education in particular: the Chancellor's Award (for teaching and learning, and research), the Vice-Chancellor's Book Awards, the Vice-Chancellor's Award for Excellent Supervision, Exceptional Academic Achievers Awards, Exceptional Young Researchers Awards, and the recognition of National Research Foundation (NRF) rated researchers. The Vice-Chancellor's report (in Section 7.8.1) lists the recipients of the Chancellor's Award for Research, the Vice-Chancellor's Book Awards and the Vice-Chancellor's Award for Excellent Supervision.

Exceptional Academic Achievers Awards

These awards are made in recognition of senior academics who are highly regarded by their peers and have consistently excelled in the areas of under- and postgraduate teaching and learning, research, community service and administration. The following awards were made for 2022:

- → Prof R Gupta (Department of Economics)
- → Prof ENM Chirwa (Department of Chemical Engineering)
- → Prof JW Maina (Department of Civil Engineering)
- → Prof IK Craig (Department of Electrical, Electronic and Computer Engineering)
- → Prof DD Tladi (Department of Public Law)
- → Prof T Coutinho (Department of Biochemistry, Genetics and Microbiology)
- → Prof PW Chirwa (Department of Plant and Soil Sciences)
- → Prof A Bekker (Department of Statistics)
- → Prof A McKechnie (Department of Zoology and Entomology)
- → Prof SN Venter (Department of Biochemistry, Genetics and Microbiology)
- → Prof S O'Connell (School of Arts)
- → Prof T Rossouw (Department of Immunology)

Exceptional Young Researchers

This award is given to exceptional young achievers in research, as seen against the University's strategic goals of achieving academic excellence, international competitiveness and local relevance. The following awards were made for 2022:

- → Prof T Mawela (Department of Informatics)
- → Prof D Le Roux (Department of Electrical, Electronic and Computer Engineering)
- → Dr C Lavery (Department of English)
- → Dr P Gutura (Department of Social Work and Criminology)
- → Prof MJ Murcott (Department of Public Law)
- → Dr PM Wilken (Department of Biochemistry, Microbiology and Genetics)
- → Dr IN Fabris-Rotelli (Department of Statistics)
- → Prof D Swanepoel (Department of Speech-Language Pathology and Audiology)
- → Prof NC Bennett (Department of Zoology and Entomology)

3.4.7.2 External research awards

It was another exceptional year for UP researchers with our academic staff being honoured by a wide range of organisations. Some highlights include:

- → A historical novel by a fellow in Humanities at Future Africa, Dr Nokuthula Mazibuko Msimang, made the list of Brittle Paper's 100 Notable African Books of 2022. The book, *The Daughters of Nandi*, is a fictional account of the life and times of King Shaka's mother, the unforgettable Queen Nandi of the Mhlongo people. Dr Msimang also won the Chairperson's Award at the 2022 South African Literature Awards, recognising her body of work over the past 30 years;
- → Prof Fourie Joubert, Director of the Bioinformatics and Computational Biology Unit, was the first recipient of a Gold Award for achievement in Bioinformatics by the South African Society for Bioinformatics (SASBi). The award exemplifies his outstanding contributions to the field of bioinformatics in South Africa;
- → Prof Evans Chirwa was awarded the NSTF-Water Research Commission (WRC) Award during the 24th National Science and Technology Forum in partnership with South32 (NSTF-South32) Awards. Prof Chirwa, the Rand Water Research Chair: Water Utilisation in the Department of Chemical Engineering, was awarded for his work on 'the introduction into South Africa of the use of biological analogues in advanced water treatment and water recovery with applications in metal-halide heterogeneous photocatalysis';
- → Prof Vukosi Marivate, an associate professor in the Department of Computer Science and the ABSA Chair of Data Science in the Faculty of Engineering, Built Environment and Information Technology, was a recipient of the Google AI Research Scholar Award for 2022. This award supports early-career researchers who are pursuing cutting-edge research in fields relevant to Google;
- → Prof Theresa Rossouw of the Faculty of Health Sciences was awarded the Silver Scientific Achievement Award at the 2022 South African Medical Research Council (SAMRC) Scientific Merit Awards in recognition of the excellence of her research and to recognise her as an outstanding South African scientist who has contributed to raising the profile of science in South Africa;
- → Prof Liesel Ebersöhn in the Faculty of Education was awarded the prestigious Deutscher Akademischer Austauschdienst (DAAD) award from the University Academics and Scientists Programme, Universität Hamburg;
- → Dr Zack Enslin, a senior lecturer in the Department of Financial Management, Faculty of Economic and Management Sciences, won the CIMA Research Excellence Award. The award-winning research, co-authored with Profs John Hall and Elda du Toit, investigated the level and trend of business decision-making involvement of management accountants; and
- → The Society for Industrial and Organisational Psychology South Africa (SIOPSA) awarded Prof Eileen Koekemoer of the Faculty of Economic and Management Sciences the 2021/2022 Presidential Award for Excellence in Industrial and Organisational Psychology (IOP).

3.4.8 Research funding

Success in securing external research grants and contracts is necessary to boost research funding and validate the recognition UP receives as a research-intensive university that undertakes research that has a high impact and is relevant to the contexts in which we live.

3.4.8.1 External funding

The European Union (EU) remains an important source of research funding. UP has actively participated in the EU's flagship research funding programme, Horizon Europe, launched in June 2021. This programme focuses on establishing international consortia of researchers cooperating globally in various fields to solve complex international problems. During 2022, seven new Horizon Europe projects were approved in which UP is a participant.

Besides the Horizon Europe programme, UP is also an active participant in the Erasmus+ programme, which includes the European Education and Culture Executive Agency (EACEA) Capacity-building in Higher Education and the Jean Monnet programmes.

UP is also participating in various other EU programmes, including the ERA-NET Co-fund on Food Systems and Climate (FOSC), M-ERA.NET funding for material science and engineering, and the LEAP-RE, a Long-Term Joint Research and Innovation Partnership on Renewable Energy between the European Union and the African Union, which in certain cases also involves industrial partners. These projects also consist of international consortiums. In most cases, the national funding bodies of the participating countries are funded by the European Commission or receive national funding made available by the respective national funding bodies and/or departments.

Below are a few examples of EU-funded projects:

FoSTA-Health

The Food Systems Transformation in Southern Africa for One Health (FoSTA-Health) project is led by Prof Wanda Markotter of the Department of Medical Virology, Faculty of Health Sciences. FoSTA-Health will develop ambitious and inclusive visions and action plans for transforming food systems aimed at achieving positive One Health outcomes in southern Africa. The project is centred on four key transformation agendas:

- (1) transformations within and out of maize;
- (2) transformations of land use and irrigation;
- (3) transformations from domestic to export markets; and
- (4) diet diversification.

KADI

The **K**nowledge and Climate Services from an **A**frican Observation and **D**ata Research Infrastructure (KADI) project is led for UP by Prof Rebecca Garland of the Department of Geography, Geoinformatics and Meteorology, Faculty of Natural and Agricultural Sciences. KADI aims to provide concepts for developing the best available science and science-based services in Africa that are needed to sharpen our common action on climate change as outlined in the Paris Agreement and the UN Sustainable Development Goals, in particular SDG 13.

MAST3RBoost

The MAST3RBoost project looks at maturing the production standards of ultra-porous structures for high-density hydrogen storage banks operating on swinging temperatures and low compression. It is led for UP by Prof Henrietta Langmi of the Department of Chemistry, Faculty of Natural and Agricultural Sciences. MAST3RBoost will bring to the stage of maturation a new generation of ultra-porous materials by turning the lab-scale synthesis protocols into an industrial-like manufacturing process.

SPIDVAC

The Improved Control of Priority Animal Diseases: Novel Vaccines and Companion Diagnostic Tests for African Horse Sickness, Peste Des Petits Ruminants and Foot-and-Mouth Disease (SPIDVAC) project is led for UP by Prof Alan Guthrie of the Equine Research Centre, Faculty of Veterinary Science. The SPIDVAC (Safe Priority Infectious Diseases VACcines) consortium consists of 13 partners from Germany, France, Spain, the United Kingdom, the Netherlands, South Africa and Senegal, who will develop innovative vaccines against African horse sickness (AHS), peste des petits ruminants (PPR) and foot-and-mouth disease (FMD) and evaluate their capabilities in vitro, demonstrate the safety and efficacy of the candidate vaccines in small-animal models and the target species and develop companion diagnostic tests to reliably differentiate between infected and vaccinated animals (DIVA).

NATAE

The Fostering agroecology transition in North Africa through multi-actor, evaluation, and networking (NATAE) project, previously led by Prof Sheryl Hendriks, is now led by Dr Danie Jordaan in the Department of Agricultural Economics, Extension and Rural Development, Faculty of Natural and Agricultural Sciences. The NATAE consortium brings together high-level research institutions, international organisations and NGOs with strong experience in Agro-Ecology (AE) approaches and exceptional capacity to induce transformational change by informing policies and education. The NATAE project aims to foster the adoption of science-based, locally tailored and co-designed AE strategies in North Africa by creating a comprehensive and quantitative baseline on AE, providing a shared understanding, multidimensional performance measures, and analyses of AE potential for meeting consumers' demand on the market.

TRIBIOME

The Advanced Tools for Integration and Synergistic Connection of Microbiomes in resilient food systems (TRIBIOME) project will be led for UP by Dr Nwabisa Mehlomakulu of the Department of Consumer and Food Sciences in the Faculty of Natural and Agricultural Sciences. TRIBIOME's vision is to develop and implement a systemic solution to transform current food production systems. To this end, TRIBIOME aims to advance alignment with the Green Deal and Farm2fork strategies by deepening the knowledge of soil/plant/animal and human microbiomes, as well as their interrelationships and interconnections, so that they can play a leading role in the resilience of food production systems in the near future.

Other notable multiyear international research grant awards include:

- → A Wellcome Trust award of R22m to Prof Nolwazi Mkhwanazi of the Centre for the Advancement of Scholarship (CAS) for a project entitled *Doing natality: making babies, making kin in Africa*. The project explores the usefulness of the notion of "doing natality" as a heuristic, theoretical and methodological tool by asking what it means for African women, men and couples to have (or not have) children; and
- → A Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) award of R11m to Dr Dominique Mystris of the Albert Luthuli Leadership Institute in the Faculty of Economic and Management Sciences for a project titled *Strengthening the South African SDG support initiative secretariat and SDG Hub*. This project aims to strengthen evidence-based policy coordination and coherence for implementing the 2030 agenda as outlined in international and national development frameworks.

External research funding increased by R64.8m in 2022 compared to 2021, with international funding recording the strongest growth – from 191 825 294 in 2021 to 255 855 116 in 2022 (see Table 3.20).

Government related:	2018	2019	2020	2021	2022
DSI, NRF, CSIR Cancer Association,					
Eskom, MRC, ARC, WRC, TIA and	375 030 115	397 911 360	351 909 595	303 576 159	300 909 759
other government agencies, and	373 030 113	397 911 300	221 202 222	303 370 139	300 909 739
research grants					
Other funds:	283 205 215	319 942 625	274 803 499	311 342 027	378 834 628
National institutes and centres	24 481 304	24 123 071	18 458 224	35 518 764	29 049 678
Private-sector research contracts	105 769 122	95 009 218	95 360 843	83 997 969	93 899 834
International grants	152 954 789	200 810 336	160 984 633	191 825 294	255 885 116
GRAND TOTAL	658 235 330	717 853 984	626 713 094	614 918 186	679 744 387

Table 3.20 External research funding, 2018–2022 (ZAR)

Source: Finance Department, February 2023 (excludes Enterprises UP)

3.4.8.2 Internal funding

UP continues to invest in research through internal funding instruments and support mechanisms. Internal funding allocations for research and postgraduate education are shown in Table 3.21. The recent increases are largely a result of increased allocations to publication fund disbursement and upgrading and maintenance of research equipment.

Table 3.21 Internal research funding, 2018 – 2022

	2018	2019	2020	2021	2022
Upgrading and maintenance of research equipment	45 500 000	47 800 000	50 700 000	53 200 000	55 900 000
Patents and IP	3 500 000	3 500 000	3 500 000	3 720 000	3 750 000
Publications funds	29 000 000	26 807 500	28 196 400	30 749 676	35 500 000
UP postgraduate bursaries	40 260 000	44 270 000	44 000 000	72 775 000	46 625 000
Postgraduate incentive fund	7 000 000	6 500 000	6 500 000	6 500 000	6 500 000
Postdoctoral fellowships	9 530 000	9 600 000	10 000 000	10 000 000	10 000 000
Research fellowships	1 500 000	1 000 000	1 000 000	1 000 000	700 000
UP Research Development Programme	5 000 000	5 500 000	5 500 000	5 300 000	5 300 000

Creative outputs	500 000	1 500 000	1 500 000	1 500 000	960 000
Strategic research projects		3 000 000	3 396 438	3 415 584	4 910 000
TOTAL	134 790 000	146 477 500	147 792 838	188 160 260	170 145 000

Source: DRI and Finance Department, January 2022 (Figures in R)

3.5 Composition and Size of the Student Body

The tables below provide an overview of the size and composition of the student body in 2022.

Table 3.22 Enrolment growth, undergraduate and postgraduate contact students(excluding occasional students), 2022

GENDER	2021 Total	Male	Female	Not Specified	Total	% Increase from 2021
Total Undergraduate (UG)	37 043	14 887	21 480	100	36 467	-1.55%
Total Postgraduate (PG)	13 117	5 701	7 386	14	13 101	-0.12%
Total (excluding Occasional students)	50 160	20 588	28 866	114	49 568	-1.18%

Of the total enrolment of 49 568 contact students (excluding occasional students) in 2022, 26.43% were postgraduates (Table 3.22), of which 66% (8 894) were black³ (Table 3.23). The percentage of black contact students (undergraduate and postgraduate) was 64.69% in 2022 (Table 3.23) and, in addition, almost all the students enrolled for distance education were black.

Table 3.23 Summary of contact student numbers per race group (excluding occasional students), 2020–2022

RACE GROUP	2020			2021			2022		
	UG	PG	TOTAL	UG	PG	TOTAL	UG	PG	TOTAL
African	17 390	7 236	24 626	19 024	7 432	26 456	19 531	7 618	27 149
Coloured	1 100	391	1 491	1 161	401	1 562	1 147	462	1 609
Indian	2 405	720	3 125	2 551	830	3 381	2 495	814	3 309
White	14 598	4 450	19 048	14 305	4 443	18 748	13 279	4 199	17 478
Not disclosed	3	11	14	2	11	13	15	8	23
TOTAL	35 496	12 808	48 304	37 043	13 117	50 160	36 467	13 101	49 568

A breakdown of the number of distance-education students is given in Table 3.24.

³ Black includes African, Coloured and Indian students.

	2020			2021			2022		
Level	Male	Female	Total	Male	Female	Total	Male	Female	Total
Undergraduate	0	0	0	75	117	192	231	378	609
Postgraduate	676	1562	2238	838	2323	3161	1030	2863	3893
Total	676	1562	2238	913	2440	3353	1261	3241	4502

Table 3.24 Distance and online education, 2020–2022

As shown in the above table, enrolments in distance and online education in 2022 increased by 34.27% compared to 2021. The increase in enrolments is a result of the following online programmes – PGDip in Public Management and PGDip in Public Health.

3.6 Access to Financial Aid

The University continues to provide funding support to enable access to higher education for financially disadvantaged students. The ability of the University to significantly enhance its support was affected negatively by the financial challenges brought about by the COVID-19 pandemic. The University implemented a large portfolio of bursaries (see Table 3.25 below) consisting of the University's own funds, funds raised through donations, gifts, grants, and funding administered on behalf of third parties such as state departments, foundations and provincial governments, and also has a strategic bursary fund to ensure that its diversity targets in undergraduate and postgraduate student numbers are met. The following are the key highlights from Table 3.25:

- \rightarrow In 2022, financial aid increased by 6,5% to a total of R2 298 million;
- → Contributions from UP's own funds decreased by 11,26% to R169 million;
- → There was an increase of 10,29% to R1 723 million in managed funding from third parties, mainly due to NSFAS's centralised funding activities (including NRF and studentships);
- → There was a 1,6% decrease in funding received from external sources (municipalities, provinces, state departments, and others); and
- → NSFAS funding administration was centralised in 2017 and now mainly constitutes DHET bursary funding to financially disadvantaged students. NSFAS has yet to close the 2017-2022 funding cycles. Accordingly, the amounts for NSFAS awards may change. NSFAS funding increased with 9.8%, to R1 452 million.

No qualifying NSFAS students were required to make upfront payments (a first payment) when registering for the 2022 academic year. The University also worked closely with NSFAS to support students who may have qualified for NSFAS, but who had not submitted their applications timeously and those who had appealed NSFAS decisions.

UP Assist funding was made available to missing middle students who were financially needy, with priority given to final-year students.

	2018	2019	2020	2021	2022
	Rm	Rm	Rm	Rm	Rm
BURSARIES					
Awarded from own funds:					
Merit awards	46.85	48.97	48.17	65.97	48.88
Postgraduate awards	40.26	55.92	66.19	65.60	60.42
Sports bursaries	8.92	9.58	6.39	7.80	8.88
Special bursaries*	18.62	16.39	19.21	21.47	21.35
Fundi (previously Eduloan)	2.19	2.11	1.85	1.59	1.71
Personnel bursaries	23.59	23.49	24.11	23.34	23.50
Family discount	5.28	6.96	5.75	5.33	4.84
Subtotal	145.71	163.42	171.67	191.10	169.58
Awarded from funds allocated to UP:					
NSFAS bursaries	538.02	815.11	1 057.77	1 321.47	1 451.79
NRF	64.64	51.37	59.20	51.26	65.06
General studentships**	77.33	91.98	79.39	89.45	89.33
Other managed funds	88.09	99.19	78.95	99.87	116.38
Subtotal	768.08	1 057.65	1 275.31	1 562.04	1722.56
Awarded by external organisations and					
administered by UP:					
Municipalities	12.52	16.5	11.66	9.91	6.80
Provinces	86.72	70.71	63.54	56.38	46.90
State departments	16.23	17.83	17.67	15.98	18.32
General	269.49	307.72	301.95	296.00	311.97
Subtotal	384.96	412.76	394.82	378.26	384.00
SUBTOTAL: BURSARIES	1 298.75	1 633.83	1 841.80	2 131.4	2,276.13
LOANS					
Awarded from own funds:					
UP NSFAS	-	-	-	-	-
UP loans	9.12	15.17	9.42	10.95	6.28
Awarded from funds allocated to UP:					
National Student Financial Aid Scheme	1.7	-	-	-	-
Awarded by external organisations and					
administered by UP:					
Fundi (previously Eduloan)	19.74	18.96	16.65	14.34	15.39
SUBTOTAL: LOANS	30.56	34.13	26.07	25.29	21.67
TOTAL: BURSARIES AND LOANS	1 329.31	1 667.96	1 867.87	2 156.69	2,297.80

Table 3.25 Financial aid to students, 2018–2022

* Special bursaries include the Vice-Chancellor and Principal's special awards for disadvantaged students, Dux learner bursaries, Veterinary Science Bursaries, BSc four-year bursaries, UP with Science bursaries, as well as bursaries awarded from grant funds.

** Studentships are bursaries awarded by faculties mainly to master's and doctoral students from externally sourced funds.

The University recognises the importance of postgraduate education in contributing to high-level skills development and specialised knowledge nationally, and to replenishing the human capital required by the country. Students who have been admitted to postgraduate programmes and have the necessary academic merit are eligible to be nominated for UP Postgraduate Bursaries. The

University supports postgraduate students in applying for bursaries from external bodies (such as the NRF) and coordinates the allocation of NRF block grants to ensure that all available funds are allocated. From 2019, the University implemented a plan whereby financially challenged postgraduate students who qualify academically can apply for the award of a UP grant equivalent to the upfront or first payment.

3.7 **Concluding Comment**

As can be seen from the foregoing report, it is clear that during 2022, the Senate of the University of Pretoria fulfilled its statutory mandate as set out in the University Statute. As the highest academic decision-making body of the University, Senate played a vital role in fostering and supporting the vision and strategic goals of the University.

Carl Prof T Kupe

21-06-23

Date

Chairperson of Senate

4. REPORT OF THE INSTITUTIONAL FORUM TO COUNCIL

The Institutional Forum (IF) advises Council and the Executive on the following matters affecting the University:

- \rightarrow the implementation of the Act and national policy on higher education;
- \rightarrow the formulation of race and gender equity policies;
- \rightarrow the selection of candidates for senior management positions;
- → codes of conduct;
- → mediation and dispute resolution procedures;
- → the formulation of policy for fostering an institutional culture characterised by tolerance, respect for fundamental human rights and a positive academic climate; and
- \rightarrow the management of cultural diversity on the University's campuses.

In 2022, the IF had three meetings and comprised two representatives of the Executive of the University appointed by the Vice-Chancellor and Principal, two representatives of Council elected by Council, two representatives of Senate elected by Senate, a maximum of five representatives elected from the ranks of the trade unions and staff associations recognised as such by the University as set out in paragraph 40(3) of the Statute (2018), one member appointed by the President of the Convocation, one disabled person (either a member of staff or a student) appointed by Council, not more than ten student representatives in accordance with an appointment procedure of the SRC set out in the Institutional Rules, and a maximum of three employee or student members, appointed by Council after consultation with the IF, either on the basis of their expertise and experience, or in order to represent a specific interest group or groups on campus not already represented in the IF.

The IF identified the following matters as priority focus areas on its agenda for 2022:

- \rightarrow the impact of the COVID-19 pandemic on staff and students;
- \rightarrow the return of students to campus; and
- \rightarrow gender-based violence.

At its second meeting of the year, the IF resolved to have 'policy reviews' included as a standing item on the IF agenda as a means to encourage members of the committee to be vigilant in identifying potential discrimination and inefficiencies in current policies of the University in order to recommend review of these policies to the relevant policy owners.

As part of its focus on gender-based violence, the IF requested that the SRC table a report at each meeting of the IF on the cases of gender-based violence reported via the SRC's GBV Helpline. As a result of the COVID-19 pandemic and students being based at home for the majority of 2022, the number of cases reported to the committee was unusually low compared to previous years. After the return of students to campus from 25 July 2022, there was an increase in the number of reported cases of GBV. The SRC confirmed that it was monitoring such cases and provided constant feedback to the IF on the effectiveness and efficiency of the University's systems in addressing such cases.

In 2022, the IF voted on the suitability for appointment of the candidate nominated for the position of Chancellor at UP. Following extensive consultation and voting processes by various University structures, the University appointed Emeritus Justice Sisi Khampepe as Chancellor with effect from 28 June 2022. The Forum also voted on the suitability for appointment of candidates for three senior appointments in the University, which included the position of Vice-Principal: Academic and Vice-

Principal: Research, Innovation and Postgraduate Education, as well as the re-appointment of the Registrar.

At its meeting of 23 May 2022, the IF was consulted by the Director: Transformation, Ms Ntsikie Loteni, on the development of a Language Development Plan for the University. The Language Development Plan is being drafted in order to interrogate whether the principles enshrined in the UP Language Policy are relevant and adequate, to identify ways in which the Language Development Plan will apply these principles, and to develop an appropriate plan for the University to give effect to the Language Policy. Ms Loteni and the IF engaged on the Language Policy and discussed whether it was still seen as ideal to facilitate transformation in terms of language in the University. The Forum agreed that the consultation process for the review of the Language Policy was inclusive and exhaustive, with the Policy reflecting the views of all stakeholders that were consulted. Members provided input and comments on the draft Language Development Plan, which would be tabled at the Executive Committee for final approval.

The Director: Human Resources presented the revised Disciplinary Code and the revised Grievance Policy and Procedure to the IF. The IF also noted a number of new and/or revised policies and associated documents, namely the Alternative Dispute Resolution Policy, the Employment Equity Policy, the Employment Equity Procedure, and the Diversity Fund Guidelines. The union representatives on the IF confirmed that all the above-mentioned policies were consulted with and received approval from the University of Pretoria Bargaining Forum (UPBF). The Director: Human Resources informed the committee that the Alternative Dispute Resolution (ADR) Policy was being introduced in order to promote collaborative and consensual dispute resolution, and to decrease the use of the adversarial dispute resolution mechanisms relied on in the past. The presentation on the Employment Equity (EE) Policy, EE Procedures, and Diversity Fund Guidelines highlighted that the policies would promote diversity and transformation, encourage proportionate representation of designated groups across all occupational categories and levels, and ensure that there is adequate resource mobilisation to achieve organisational goals through identified employment equity projects.

The IF periodically receives feedback from the Department of Human Resources on the University's progress towards reaching its annual employment equity targets. At its meeting of 15 August 2022, the meeting was joined by the University's Employment Equity and B-BBEE Specialist who presented the Mid-Year Employment Equity Monitoring Report for 2022. From the data presented, the Forum noted that the University had met and exceeded its targets for professional service staff. In terms of academic staff, the committee was informed that the University was currently slightly below its annual target and there was room for improvement, especially in the categories of Head of Department (HOD)/Professor and Senior Lecturer. It was noted that this issue was being experienced across the higher education sector, especially at research-intensive universities.

In terms of challenges being experienced by staff on campus, the IF includes representation from union representatives, professional service staff, and academic staff. The Forum attempts to ensure that staff-related issues are discussed openly, should such matters be raised by any members. In 2022, no significant matters were raised for inclusion on the agenda of the IF as such matters were raised and discussed at the UPBF.

In 2022, students were represented in the IF by ten members of the SRC. Students raised concerns regarding accommodation arrangements at the University since the reopening of the University for contact classes. In its response to the COVID-19 pandemic, the University had amended its rules with regard to the occupation of residences, with rooms that previously catered for two students now being limited to one occupant. Following the repeal of COVID-19 restrictions, the University was not in a position to undo the measures it had put in place for COVID-19 as the allocations and billing of rooms for 2022 had already taken place. This led to some students struggling to secure accommodation in University residences. In response to this, the Vice-Principal: Student Life confirmed at a meeting of the IF, that as of 2023, the University would revert to pre-COVID-19 arrangements in terms of room allocations.

There has been an increased level of member participation in IF meetings in 2022 and, as the University continues towards fulfilment of its 2022-2026 Strategic Plan, the IF remains an important stakeholder in identifying and addressing key issues affecting staff and students.

A report on the activities of the IF during 2022 served at Council in November 2022.

les O

21 June 2023

Ms N Lesela Chairperson: Institutional Forum Date

5. REPORT ON INTERNAL ADMINISTRATIVE / OPERATIONAL STRUCTURES AND CONTROLS

UP is committed to ensuring the accuracy, comprehensiveness and reliability of its reported administrative information, including academic and financial information, as well as information on the sustainability of its operations. This is achieved, amongst others, through maintaining an effective, efficient, and transparent system of governance and internal control. These systems are designed to provide reasonable assurance that the University's systems, information, and assets are safeguarded against unauthorised activities, and that the University information systems provide a reliable basis for the academic administration, as well as the preparation of financial statements and related institutional reports.

The internal control systems are based on the University's organisational structure and the division of responsibilities. The University's established policies and procedures, including its General Academic Regulations, the Employee Code of Conduct and related Disciplinary Code, the Code of Conduct for Students and Disciplinary Rules for Students, as well as various academic and administrative procedures, are communicated throughout the institution to foster a strong ethical climate.

Compliance, ethics and anti-fraud staff training sessions and awareness campaigns are held throughout the year. In addition, the University promotes an ethical student culture with various student academic integrity awareness campaigns. The University has adopted a Whistle-blowing and Anti-Fraud Policy and an Institutional Compliance Framework Policy to establish the University's clear stance on fraud, corruption, legislative and policy non-compliance, as well as unethical practices, and to reinforce existing systems, policies and procedures aimed at preventing, detecting, responding to and reducing the incidence and impact of irregular activities.

Internal academic and financial control systems are appraised on a continuous basis by the Department of Internal Audit and Compliance Services ("Internal Auditors"), which is independent of the University's management and operates in terms of the mandate outlined in the Internal Audit Charter. Weaknesses identified by the internal auditors in respect of the internal control systems are brought to the attention of external auditors, management and the Audit, IT and Risk Committee of Council. The implementation statuses of all agreed management actions arising from internal audits, as well as from ad hoc review projects (including whistle-blowing investigations) are followed-up with the responsible members of senior and executive management within 6 to 18 months after completion of each review, and reported to the Audit, IT and Risk Committee of Council.

Based on the results of the planned audits, ad hoc reviews and follow-up reviews undertaken during 2022, key internal administrative and operational controls were found to be generally effective in all material aspects and reported findings did not expose the University to significant risks.

22 June 2023

Ms OV Granova-Mooi Director: Internal Audit and Compliance Services Date

26 June, 2023

Date

Ms T Ramano Chairperson of the Audit, IT and Risk Committee

6. **REPORT OF THE AUDIT, IT AND RISK COMMITTEE**

The Audit, Information Technology (IT) and Risk Committee of Council is constituted in terms of paragraph 23(1) of Chapter 5 of the Statute (2018) of UP. The primary purpose of the Committee is to assist Council in discharging its duties related to the safeguarding of the University's assets, updating of the University's accounts to provide a reasonable reflection of its financial and cash-flow position, income and expenditure, assessment of business risks and ensuring that effective internal control systems are developed and implemented, understanding the University's overall exposure to IT risks, and ensuring compliance with all applicable legal requirements, legislation and accounting standards.

The Committee ensures that the management of the University has a proper risk management framework in place, continually assesses business risks, and ensures that effective control systems aimed at managing material risks, preventing losses and harnessing opportunities, are developed and implemented. The Committee further oversees IT governance and the implementation of the IT governance framework, monitors and evaluates significant IT investments and expenditure, ensures that management has a system in place to manage IT resources efficiently in order to facilitate the achievement of strategic objectives, deliver value and mitigate IT-related risks. The Committee reviews the internal auditor's assessment of risks and approves the internal audit plan, monitors the activities, scope, adequacy and effectiveness of the internal audit function and audit plans, and reviews and/or approves the external audit plans, findings, management letters, reports and fees. The Committee regularly reports to Council on the execution of its responsibilities.

The Committee consists of a minimum of four Council members who possess expertise in, amongst others, auditing, financial management, IT management and risk management, and who are not in the employ of the University. Meetings are attended, by standing invitation or by invitation, by the Vice-Chancellor and Principal, the Registrar, the Executive members responsible for Finance and IT, the Director: Finance, the Director: Internal Audit and Compliance Services, a representative from the co-sourced independent firm of internal auditors, a representative of the external auditors, and a representative from the Office of the Auditor-General of South Africa. The Committee had three ordinary and one special meeting in 2022. The minutes of the meetings were tabled at Council meetings for noting.

Council, at its meeting of 24 June 2021, reconstituted all its committees and elected chairpersons for each committee for a period of two years. The Audit, IT and Risk Committee of Council consists of Ms MMT Ramano (Chairperson), Mr BJ Kruger, Mr AE Swiegers, Ms CM Read, Mr DJ Fourie and Mr MW Madi. An attendance record of the Committee's meetings is presented in in Table 6.1 below.

Meeting	Committee members present (of 6 members)	Absent with apology	Vacant seats
12 May 2022	6	0	0
13 July 2022 (special)	5	1	0
25 August 2022	6	0	0
20 October 2022	5	1	0

Table 6.1 Attendance: Audit, IT and Risk Committee of Council, 2022

26 June, 2023

Ms MMT Ramano Chairperson of the Audit, IT and Risk Committee of Council

<

Date

21/06/2023

Mr KD Dlamini Chairperson of Council

7. VICE-CHANCELLOR'S REPORT ON MANAGEMENT AND ADMINISTRATION

7.1 Goals, Plans and Priorities

In 2022, we embarked on the last phase of our five-year strategic plan that will lead us to 2025 and beyond. Efforts over the past four years to achieve our strategic goals were rewarded with an increase in student access and success; high-quality research for greater societal impact; global recognition; diversity, equity and inclusion; and institutional sustainability. Examples of these can be found throughout this report.

As we advance towards and beyond 2025, we will continue to strive to meet our goals for the greater good and benefit of society as a whole. Our well-educated, skilled graduates and relevant transformative research are key agents and drivers of sustainable inclusive development. Our strategic goals are:

- I. To enhance access and successful student learning
- II. To strengthen the University's research, international profile, and global engagement
- III. To foster and sustain a transformed, inclusive, and equitable University community
- IV. To enhance institutional sustainability
- V. To strengthen the University's social responsiveness and impact in society

Our next five-year strategic plan, *Destination 2026 and Beyond*, presents an opportunity to prepare our future pathway, as we head towards re-imagining and re-positioning UP as a leading researchintensive university in Africa, recognised internationally for its quality, relevance and impact, and also for developing people, creating knowledge and making a difference locally and globally.

The University's agility in fast-forwarding the use of technology has enabled us to make important advances in teaching, learning, research and innovation by broadening our reach and building on each other's areas of expertise with transdisciplinarity as the driver and digitalisation as an essential resource.

7.2 Impact of Sector Developments

7.2.1 COVID-19 update

With the start of the new semester on 21 February 2022, all facilities, including social learning spaces, libraries, residences and sporting facilities, were open to students. On-campus classes for certain programmes resumed with strict adherence to COVID-19 regulations and protocols.

We continued to encourage the UP community to get vaccinated and, for those who were eligible, to get their booster shots.

7.2.2 Funding

The University received R20,5 million more than the budget in respect of the block grant from the Department of Higher Education and Training. The original budget included 4% for salary increases, which was increased to 5% at a cost of R28 million.

Owing to the shortfall in funding originally allocated to the National Student Financial Aid Scheme (NSFAS), the DHET had to reprioritise funding from earmarked grants totalling R1,5 bn. The reason cited by the DHET for reprioritising earmarked grant funding was that there was a trend of underspending in this category over the past few years.

DHET proposed that the country's 26 universities increase fees for the 2022 academic year by 4,3% for tuition and 6,3% for accommodation. Universities South Africa (USAf) had proposed a 5% increase in tuition fees and 7% for residence/accommodation fees, indicating that the increase barely covers the cost of inflation. For the 2022 academic year, tuition and accommodation fees were increased by 4,23% and 6,23%, respectively.

NSFAS released its funding list for eligible students who intend to further their studies in any of South Africa's 26 public universities and 50 technical and vocational education and training (TVET) colleges to higher education institutions on 1 February. For the 2022 applications cycle, NSFAS received 906 429 applications of which 30% (276 748) received a real-time decision when applying via the myNSFAS portal.

7.3 Student Registration and Graduation

7.3.1 Student registration

The University continues to experience an increase in applications, with 46 854 undergraduate applications received during 2022 for the 2023 admit term. This was 870 more applications than we received for the 2021 intake.

UP hosted the annual #ChooseUP Day virtually on 10 September 2022. The event served as an introduction for prospective students and their parents/guardians to the University, its staff, campuses, faculties and student services. The event included a virtual tour of the campus. More than 8 836 conditionally admitted students confirmed their participation in the event. During the live session, six conditionally accepted students won study bursaries to a total value of R120 000.

Similarly, the admission cycle for the 2023 intake was very successful, with a total of 19 490 admissions at the end of 2022. However, after the release of the National Senior Certificate (NSC) and equivalent results, final admissions stood at 16 464, which was close to the target of 16 678.

Special arrangements were made for registrations to take place online and for the second year, the Welcome Day and Academic Orientation took place virtually.

7.3.2 Student graduation

For the first time since the onset of the COVID-19 pandemic and lockdown restrictions, the University hosted in-person Autumn and Spring graduation ceremonies. A total of 13 555 qualifications were awarded (2021: 13 593). Doctoral graduates numbered 333, with 1 822 receiving their master's degrees.

Among the notable graduates were Mathias Shunmugam and Karabo Maleka. Shunmugam, from the Faculty of Theology and Religious Studies, was awarded a doctorate. At 25, he is the youngest PhD holder in the Faculty's 105-year history. Maleka became the first black student to graduate with a PhD in speech pathology from UP. She says her late grandmother, who was a nurse, inspired her to pursue a career in the health sector.

UP also held two online graduation ceremonies, the first for recipients of the Postgraduate Diploma in Public Health, the second for the Postgraduate Diploma in Public Management cohort. The PGDip (Public Health) programme is a first for UP and South Africa.

The Faculty of Veterinary Science also heralded a new chapter in the education of veterinary nurses in South Africa by conferring veterinary nursing (BVetNurs) degrees on the country's first group of graduates. The class of 2021 achieved a 100% pass rate. UP is the only university in Africa that provides training for veterinary nurses.

7.4 Student Life

Significant investments were made during 2022 to support a vibrant student experience.

7.4.1 Student health and well-being

The Student Counselling Services Unit expanded its hybrid service offerings. Given the increased demand and post-COVID mental health challenges, additional counsellors and interns were appointed to increase capacity and improve turnaround times. A protocol for emergency referral was developed, with stratified intervention levels commensurate with the severity of cases.

"Psychological first aid" training sessions were presented to faculty members and Heads of Residences. Despite financial constraints, psychiatric care was extended by contracting two local psychiatrists to attend to complex presentations.

The AI mental health chatbot capacity and offering were also expanded. SCU-B, an artificial intelligence (AI) tool that stimulates conversations through voice commands and text chats for counselling purposes, was launched in 2021 to ensure student mental health and well-being during the ongoing COVID-19 lockdown.

Monthly mental health and well-being awareness campaigns were also run on sensitive topics such as suicide prevention, gender diversity, consent to intimacy, and how to manage a panic attack.

A BounceUP podcast project was launched in collaboration with TuksFM, providing relevant mental health content on topics such as *"What is Mental Health and Mental Illness"*, *"Understanding Resilience"* and *"Romantic Relationships and Gaslighting"* to a wider student audience. The podcasts were published on Spotify, the TuksFM platforms and the Student Counselling Unit website.

Another way in which the emotional well-being of students (and staff) was considered was a visit by TOP Dogs, to provide three animal-assisted therapy sessions ahead of examinations. Research indicates that human-animal interaction has a relaxing and stress-reducing effect on people and the TOP Dogs visits received an overwhelming response from students and staff who filled the lawns on campus in their numbers.

7.4.2 Student housing

The capacity in UP-owned student residences remained constrained in 2022 on account of the COVID-19 protocols. While only around 6 500 students were placed in University residences, the capacity in accredited private accommodation was expanded. Tirisano and Varsity Lodge residences were renovated in 2022.

7.4.3 Social care and dignity interventions

The Student Nutrition and Progress Programme (SNAPP) continued to address the issue of student hunger. A hybrid approach was followed, with virtual grocery vouchers and food parcels issued to those within the vicinity of UP campuses during the first semester. The programme reverted to the pre-COVID method of assistance when contact classes resumed in full. A total of 1 255 students were assisted through SNAPP and 2 505 food parcels were distributed. The SNAPP programme benefited from a generous donation as part of the Tiger Brands' Plates4Days Programme in 2022. A comparison of the beneficiaries' grades revealed a 3.3% increase in the average of students placed on the SNAPP.

In May, FLY@UP hosted a winter clothing drive. Donation bins were placed all around campus for students and staff members to donate their pre-loved, clean and ready-to-wear clothes. The donations that were collected allowed for a free-of-charge thrift store for students.

7.4.4 Student life and student development

At the beginning of 2022, a variety of electronic media platforms were optimised to expand the student life activities and to create a sense of pride and belonging among students and student leaders.

In April, the UPLYMPICS games made its debut at the athletics stadium. This inter-house competition included indigenous games, a cycling marathon, a running marathon, online chess, athletics and a spectators' challenge. In October, the first student public speaking championship was held on the Hatfield Campus.

7.5 Collaboration and Advancement

Mutual collaboration between institutions enables us to make important advances in teaching, learning, research and innovation by building on each other's areas of expertise with transdisciplinarity as the driver and digitalisation as an essential resource. In 2022, the University signed a range of agreements which promise impact at both grassroot level and at institutional level.

7.5.1 Institutional agreements

The following institutional agreements will further leverage international and national funding opportunities, student and academic exchange and collaboration.

King's College, London

The Memorandum of Understanding (MoU) between UP and King's College, London, aims to establish a partnership regarding potential collaborative opportunities on postdoctoral research, and global and transnational leadership. Specifically, the first project will be a Doctoral Engineering

Programme anchored at UP. King's College is part of the University of London system of 17 institutions.

University of Nairobi

Our two universities have been collaborating on an informal basis, and the signing of an MoU enables the parties to take the partnership to the next level, making it easier to mobilise resources to support implementation. Both universities share the desire to strengthen intra-Africa university collaboration, are members of the African Research Universities Network (ARUA), and jointly host the ARUA Centre of Excellence in Sustainable Food Systems with the University of Ghana in Legon, Accra.

Carleton University, Canada

UP and Carleton University agreed to facilitate and promote cooperation, with a view to supporting research collaboration, capacity building, and other forms of academic partnerships.

Dr Sam Motsuenyane Development Foundation

This agreement will see us collaborating in areas that include rural development, poverty and unemployment alleviation, as well as township economic revitalisation. The foundation was established by Dr Sam Motsuenyane, a pioneering businessman who has dedicated his life to empowering individuals and communities to participate in rural and township economies.

Oppenheimer Generations Foundation and the Benjamin R Oppenheimer Trust

Through this agreement, UP has instituted two research chairs that will pursue fascinating, important and novel research. The Oppenheimer Chair for Emerging African Scientists in Non-invasive Wildlife Research was awarded to the Director of our Mammal Research Institute, Professor André Ganswindt, as principal investigator. The chair supports highly motivated postgraduate students from Africa to conduct research that focuses on non-invasive approaches to wildlife research and management.

7.5.2 International grants

Advancement, in the broadest sense, is a priority area in which we invest much time and effort to secure the future sustainability of the University and to realise the University's potential to meaningfully impact on the lives of members of the local, regional and global community. Two of the grants to advance this aim are listed below.

Margaret McNamara Education Grants (MMEG)

This partnership agreement will support selected MMEG grantees for the 2023 to 2025 academic years. MMEG is a registered non-profit organisation whose mission is to provide financial resources to women from developing countries to complete their academic degrees, with the expectation that those who receive grants are committed to working to improve the well-being of women and children.

Each grant awarded under this agreement is of a value equivalent to US\$7 000. UP and MMEG will contribute equally to each grant awarded.

South Africa-Canada University Network (SACUN)

The National Research Foundation (NRF) has granted R10 million towards formalising this network to help Canadian universities formulate their Africa strategies and partner with African universities. Prof Kupe was nominated as the lead South African Vice-Chancellor of the Network.

7.6 Preparing for the New World of Work

Our youth are our greatest resource and helping them understand what the future of work will look like is pertinent to the success of their employment and of our continent. A core focus of all our faculties is to establish business incubation hubs in several universities in Africa, focusing on entrepreneurialism, self-employment, training and research.

Preparing learners for automation, digital platforms and other innovations is the cornerstone of their education for a future that is already on our doorstep.

Our ongoing efforts to make our students future-fit has earned the University international recognition. In the 2023 QS World University Rankings, UP is now ranked second in South Africa and 190th in the world according to the Employer Reputation indicator. This indicates that we produce graduates who understand the world of work and can make a valuable contribution right from the start.

7.6.1 Existing tools and skills

The University offers a wide range of free courses that are available online on clickUP. The Ready for Work courses help our students prepare for the workplace and what to expect from a corporate work environment. UP students also have access to the Entrepreneurship programme, which is another free, online course that teaches them how to use their knowledge, skills and talents to start their own business. In this way, they can become job creators rather than job seekers.

The UP Career Services Mentorship Programme, developed in 2019, is available to all final-year students to hone their skills. The programme recognises the importance of students needing the guidance of industry specialists to prepare them for the world of work and aims to link students with industry experts for six months. The minimum requirement of the programme is for the mentor and mentee to engage over four sessions, either online or face-to-face.

JuniorTukkie is a flagship project that helps high school learners with schoolwork and career choices. Through their free jTOnline e-learning platform, the team from Department of Enrolment and Student Administration has embraced the educational opportunities that the virtual world presents, one video at a time. Following the outbreak of the COVID-19 pandemic, the JuniorTukkie YouTube channel was launched, followed by an e-learning platform, juniortukkie.online. The jTOnline platform and its associated channel have garnered 100 000 views to date. The platform provides extensive free learning content for Mathematics, Physical Science, Accounting, Life Sciences, Natural Sciences and English for Grades 8 to 12 across South Africa.

7.6.2 New developments

Centre for the Future of Work

UP's newly launched Centre for the Future of Work is looking at all the new ways of working and seeking fulfilment in our work. In this way, we are making inroads into creating a better future for young people in South Africa, Africa and the rest of the international community. Through research we intend addressing issues like youth unemployment, the gig economy and improved and better ways of flexible and hybrid work.

Preparing for work, at school

The Faculty of Engineering, Built Environment and Information Technology has adopted the Phathudi Comprehensive School in Atteridgeville, Pretoria. The Faculty will revitalise a computer centre and offer basic computer training to learners at the school, and assist them with the Eskom Expo for Young Scientists and other projects. The school will also join the Junior Tukkie initiative and use the Junior Tukkie online platform for Grade 8 to 12 learners.

The Pre-University Academy (PUA) collaborated with the Hong Kong Polytechnic University to provide school learners from Mamelodi with a rich learning experience in robotics and coding. The PUA is a secondary school project that readies high school learners for tertiary education, focusing its efforts on Mathematics, Science, creative writing and Philosophy.

The workshop involved 16 students from the Hong Kong Polytechnic University, 63 learners from the PUA and five UP Engineering students. The PUA was the 11th group of learners to participate in the project and the only group from Africa.

Digital Capability Laboratory

Launched towards the end of 2022, this employability focused laboratory will help students with the requisite skill-set to thrive in and adapt to the constantly evolving world of work. It aims to address South Africa's staggering youth unemployment rate by upskilling students to develop them into employable, innovative and solution-driven graduates.

The lab was launched as part of the European Union's (EU) Erasmus+ SUCSESS Project, an initiative that researches ways to tackle the scourge of youth unemployment and boost student employability in South Africa. UP is one of six higher education institutions involved in the EU Erasmus+ SUCSESS Project.

7.6.3 International awards for technology in teaching

Two teams from UP's Department for Education Innovation won honours at the Anthology Catalyst Awards, where they were selected from a record 149 nominees from institutions in 22 countries, including the United States, Canada and Australia. The awards recognise educators who push the boundaries of what is possible when leveraging technology.

The Department also won an award in the Student Success category which measures solutions that have led to increased retention, increased completion, or improved outcomes.

7.6.4 Smart learning resources

3D-printing of bone and organ replicas

UP's Forensic Anthropology Research Centre has set up a comprehensive facility to help other departments in the University's Faculty of Health Sciences with the 3D-printing of replicas of bones and organs, such as brains, hearts and livers. This is done to improve healthcare, research methods and the teaching of students. This facility can open up the job market for students who can do 3D-image processing for medical doctors and 3D-print items for them. There are also plans to collaborate with other faculties to multiply the employability factor.

Smart Woef (SmWoef)

UP has added another member to its family of robots. SmWoef is a robotic dog that aims to digitise agriculture. It is an example of the Smart Alternative Transportation Platform and works in the Engineering 4.0 research facility to collect routine data among agricultural crops for future use and improved farming techniques.

The Smart Alternative Transportation Platform is the brainchild of Prof Wynand Steyn, Head of the Department of Civil Engineering in the Faculty of Engineering, Built Environment and Information Technology.

SmWoef joins Libby, the robotic library assistant who works at the Merensky II Library on the Hatfield Campus, and Stevie, the gender-neutral robot based at Steve Biko Academic Hospital.

7.7 Staffing

Maintaining high levels of quality and excellence in all of our core functions is, to a significant extent, dependent on the knowledge and skills, talent and commitment of our academic, professional and support staff. Attracting, developing and retaining quality staff is therefore at the core of UP's strategic priorities.

Just one of the indicators of our quality staff is UP's ranking among the world's top universities to study 20 subjects (up from 18 in 2021) in the 2022 QS World University Rankings by Subject. UP was ranked in four broad subject areas: Arts and Humanities; Social Sciences; Life Sciences and Medicine; and Engineering and Technology. A notable accomplishment is UP's Mineral and Mining Engineering ranked at position 33 (48 in 2021), which is among the top 50 worldwide.

The Times Higher Education World University Rankings 2022 by subject has ranked UP 60th in the world for law. This confirms that UP's Faculty of Law has remained the leading law faculty on the African continent for five consecutive years.

7.7.1 Research strength

Certainly, none of our achievements would be possible without a strong academic corps. UP has the highest proportion of academic staff who hold doctorates (70.9%), across all South African universities, as well as the highest number of NRF-rated researchers nationally.

Of the 605 NRF-rated researchers, 15 are A-rated researchers and 105 are B-rated, both categories reflecting internationally recognised leaders in their field. The highest number of researchers falls in the C-rating category (385).

The visibility of our leading researchers is demonstrated in the Essential Science Indicators (ESI) database, where UP is rated among the top 1% globally in 13 of the 22 fields, up from 12 in 2021 (Section 3.4.1.2 provides more information on UP's performance in ESI research fields).

7.7.2 Senior appointments

The following senior appointments were made in 2022:

- → Professor J Pillay, re-appointed as Dean in the Faculty of Theology and Religion;
- → Professor Morris Mthombeni, Dean: Gordon Institute of Business Science (GIBS);
- → Professor Saloshna Vandeyar, Deputy Dean: Research and Postgraduate Studies;
- → Dr Heide Hackmann, Director of Future Africa; and
- → Dr Elmar de Wet, Chief Executive Officer at Enterprises UP.

7.8 Notable Academic Recognition

7.8.1 Internal academic staff awards and accolades

Each year UP pays tribute to academic achievers at an annual gala event, which gives recognition to excellence and academics' contribution to the University's mission.

Chancellor's Award: Research - Prof Nigel C Bennett

Prof Nigel C Bennett is a full Professor in the Department of Zoology and Entomology in the Faculty of Natural and Agricultural Sciences (NAS) and holds the Austin Roberts Chair of African Mammalogy at the Mammal Research Institute, also in NAS. Prof Bennett's research focus is ecology, animal physiology and behaviour using the African mole-rat as his model animal. He and his co-researchers have investigated the ecological and physiological factors that affect the control of reproduction and the evolution of sociality. Prof Bennett's research has set the benchmark for our understanding of phylogenetic and ecological constraints regulating reproductive success and social evolution in mammalian species. His research record ranks him among the best researchers studying social regulation of reproduction in any group of mammals in the world.

He has published 473 papers in international peer-reviewed scientific journals, co-authored a specialist book published by Cambridge University Press and has written 15 chapters in books.

Chancellor's Award: Research - Prof De Wet Swanepoel

Prof De Wet Swanepoel is a professor of Audiology in the Department of Speech-Language Pathology and Audiology in the Faculty of Humanities, where he directs research for the World Health Organisation (WHO) Collaborating Centre for Prevention of Deafness and Hearing Loss. Prof Swanepoel is a globally recognised researcher, health innovator and speaker with more than 20 years of experience. He has been on the forefront of innovation in digital hearing health technologies and service-delivery models to make ear and hearing healthcare more accessible and affordable. He has spearheaded research related to early identification and diagnostic techniques for hearing loss, which has expanded into the area of telehealth and digital innovations for ear and hearing care. His work has pioneered and validated several tele-audiology applications and service-delivery models now used clinically. In partnership with the WHO, his research led to the development and release of the hearWHO app in 2019, which has screened close to 500 million people in more than 190 countries around the world.

Prof Swanepoel has published more than 250 peer-reviewed articles, books and book chapters. In 2022, Prof Swanepoel was awarded an A2-rating from the NRF in recognition of the high quality and wide impact of his research as a leading international scholar in his field.

Chancellor's Award: Teaching and Learning - no nominations were received for this award.

Vice-Chancellor's Book Award (Humanities and Social Sciences) - Prof Benda Hofmeyer

Professor Benda Hofmeyer, a full professor in the Department of Philosophy in the Faculty of Humanities, received the award for her book *Foucault and Governmentality: Living to Work in the Age of Control*. Using empirical research and drawing on political philosophy and political economy, this book critically analyses the dynamics, culture and forms of subjectivity of neo-liberalism.

Vice-Chancellor's Award for Excellent Supervision - no nominations were received for this award.

7.8.2 NRF Awards

The NRF awarded Prof Johan Schoeman a B1-rating for the 2022–2027 period, the highest rating ever achieved by a veterinary clinician-scientist in the Faculty of Veterinary Science. He joins two other researchers in the faculty who have received similar ratings: Professor Christo Botha, former Head of the Department of Paraclinical Sciences and Professor Alan Guthrie of the Equine Research Centre.

7.8.3 ASSAf Recognition

Three UP scientists were inaugurated as fellows of the Academy of Science of South Africa (ASSAf) for their significant achievements in advancing and applying science/scholarship, both nationally and internationally:

- → Prof Olalekan Ayo-Yusuf, School of Health Systems and Public Health;
- → Prof Andrew McKechnie, South African Research Chair (Conservation Physiology); and
- → Prof Hettie Schönfeldt, SARChI Chair in the National Development Plan Priority Area of Nutrition and Food Security.

7.8.4 National Science and Technology Forum (NSTF)/South32 Awards

Prof Evans Chirwa, Rand Water Research Chair: Water Utilisation in the Department of Chemical Engineering at UP, walked away with the NSTF-Water Research Commission (WRC) Award. He was one of nine UP researchers nominated in eight of the 13 categories, for South Africa's 'Science Oscars'.

7.8.5 Prizes, Other Awards and Appointments

- → Prof Mike Wingfield of the UP Forestry and Agricultural Biotechnology Institute (FABI) was awarded the annual Harry Oppenheimer Fellowship Award for his research into disease-causing fungi;
- → Prof Gareth Bath, Emeritus Professor in the Faculty of Veterinary Science, was awarded the Global Animal Welfare Award by the World Veterinary Association;
- → Prof Thula Simpson from the Department of Historical and Heritage Studies, Faculty of Humanities, received the National Institute for the Humanities and Social Sciences Award for his remarkable work titled *History of South Africa: From 1902 to the present*;
- → Prof Jenny Hoobler, from the Department of Human Resource Management, has been elected as a Fellow of the Society for Industrial and Organisational Psychology (SIOP). This election recognises her impactful scholarship, sterling service to the industrial and organisational psychology (IOP) profession and significant contribution to teaching and research in this area;
- → Two UP academics have featured prominently in the L'Oréal-UNESCO For Women in Science awards. Postdoctoral research fellow, Dr Ezette du Rand from the Department of Zoology and Entomology, won in the postdoctoral category of the South African National Young Talents Programme. Agil Katumanyane, a PhD student at the Forestry and Agricultural Biotechnology Institute (FABI), received the award for Sub-Saharan Africa Young Talents; and
- → Attorney Lithalethemba Stwayi from the Centre for Child Law has been selected to participate in the merit-based 2022 Mandela Washington Fellowship for Young African Leaders, a flagship programme of the Young African Leaders Initiative (YALI) run by the United States Government. The fellowship is an opportunity for young, emerging African leaders to hone their leadership skills and network with other young leaders from sub-Saharan Africa and the United States.

7.9 Student Success and Awards

At UP, we firmly believe that we are a resource to South Africa and beyond, and we take pride in producing graduates who are socially conscious, active citizens who address societal issues and positively impact our communities. We realise that beyond the boundaries of knowledge production lies the responsibility to apply our knowledge and skills to the benefit of all.

7.9.1 Student accolades

A team of six students from the Faculty of Law came third at the 29th annual International Commercial Arbitration Moot Court Competition. The team defeated approximately 265 teams, comprising more than 2 500 students and 84 jurisdictions, in the international competition held

virtually in April 2022. The UP Moot Society team's ranking is not only UP Law's strongest showing in the competition since it started participating in 2021 but also the furthest a university on the African continent has made it overall.

UP graduate Mia Gerber received a Master's in Computer Science with distinction after completing her degree in a year and a half following her return to academia. The machine-learning techniques that she developed as part of her research make artificial intelligence more accessible and can also be applied to areas relevant to the United Nation's SGDs, disease diagnosis, spam detection and sentiment analysis.

A group of students from the UP Plasma Research Unit scored a second-place finish during the International Conference on Sustainable Development 2022, aimed at finding multidisciplinary solutions to climate-related problems. UP's 'Team Tujenge' had been developing ideas for a small-scale, solar-powered water purification system using plasma technology since the beginning of 2022.

Recipients of the Vice-Chancellor's Distinguished Merit Awards (VCDMAs) were honoured at the virtual Welcome Conference ceremony in February 2022. The VCDMAs recognise exceptional schoolleaving achievers based on their Grade 12 results and their potential for success. Gauteng's overall top performer of 2021, Kristen Erasmus, who received nine distinctions, was one of the recipients of the awards. Mongiwa Hazel Ntuli, aged 15 years, is our youngest recipient of a VCDMA.

7.9.2 Alumni success

The University's 300 000-plus alumni continue to be sterling ambassadors of the University, and their achievements in an array of disciplines show that they have gained more than a degree.

Dr Gopolang Mohlabeng's research into dark matter has received global recognition and earned the UP alumnus a spot on the global 25 Rising Stars in Astronomy List. The list profiles researchers in the astronomy field from across the word whose work has contributed to our understanding of what still remains one of the greatest mysteries of nature. He graduated from UP in 2010 with a BSc degree in Physics.

David Kabwa, a former UP Student Representative Council President, was selected to be part of the 2022 United Nations (UN) UNITE 2030 Ambassadors Programme. The initiative brings together young change-makers for a 12-month programme that aims to strengthen action in order to achieve the UN's 2030 Sustainable Development Goals (SDGs).

Darren and Justin Oates, 25-year-old mechanical engineering graduates of the class of 2019, signed a licensing deal with Sony Music Entertainment Africa. This gives them the exclusive right to distribute Alter Ego's music, particularly their album #SkreeNetSag, released in mid-March 2022. The twins are also the founding executive directors of Gaztron, a company that converts vehicles to run on gas.

Emrie Brown (BCom Accounting, 1990) has been appointed as the new CEO of RMB, making her only the second woman to lead a corporate and investment banking unit in South Africa.

Ndavi Nokeri, who graduated at UP in April 2022 with a BCom degree in Investment Management, was crowned Miss South Africa 2022. She is the third consecutive Miss South Africa to have graduated from UP.

7.10 Fundraising and Student Funding

7.10.1 Fundraising and donations

Corporates and businesses continue to show their confidence in UP and have increased their support year on year. Private sector donors provide 72% of the total philanthropic income generated by the University.

In a year challenged by the socio-economic fallout of the COVID-19 pandemic, the UP fundraising team managed to surpass its 2022 target of R150 million, and even exceeded its stretch target of R200 million. The final figure collected for 2022 was R250 million. The two largest donors were the MasterCard Foundation (for student support) and the Gates Foundation (for the Centre for Viral Zoonosis).

With the launch in 2022 of the UP US Charitable Foundation and the University's Charitable Trust in the United Kingdom, we will continue to build and grow existing relationships and enhance our ability to assist students and lecturers in growing their knowledge.

The University's advancement performance has been recognised in the Annual Survey of Philanthropy in Higher Education (ASPIHE), where UP's total income represented the largest institutional philanthropic income of the universities in this sample.

UP's alumni participation rate was higher than that of most other higher education institutions, and the University had the best return on investment of all participating universities with a cost of 2 cents per rand receipted. This would have been further reduced had SETA funding been included.

7.10.1.1 University Giving Day campaign

The University Giving Day campaign to raise an additional R100 million for four major projects was officially launched in May 2022. The campaign supplements UP's day-to-day fundraising projects and its ultimate goal is to promote the culture of giving among all UP stakeholders, no matter how big or small. We intend making this an annual feature.

The 2022 campaign was a success, raising over R19 million. There was a 335 % increase in individual donations as a result of the campaign and we look forward to seeing our pool of donors increase across our various stakeholders.

The funds obtained support various initiatives at the University, including UP residences, the museums, student support, the Onderstepoort Veterinary Hospital, and faculty-specific projects.

7.10.1.2 New fundraising strategy

The fundraising team has managed a process to define each faculty's top five projects that could attract philanthropic support. This exercise has allowed the University to align all projects in each faculty to its strategic goals and to ensure that all stakeholders have sight of one another's projects, thus breaking down silos between faculties and identifying areas for collaboration.

Projects listed amount to over R1bn. Academics from across the University were asked to provide a brief description of their projects, how they fit into the institutional strategic plan, the funds required, the period covered and, where possible, suggested potential donors.

7.10.2 Student funding

R553.58 million was allocated to 38 627 students in 2022 in the form of University-managed and external bursaries. From 2020-2022 we collected R1.116 million from staff donations, with an average of 250 staff members giving per year.

In addition, UP's Department of Institutional Advancement has a division that focuses its efforts on securing bursaries from external donors to supplement University loans and bursaries.

These grants vary in amount and duration, and donors usually set the criteria for eligibility. To be considered for a bursary, students need to register for financial aid on the PeopleSoft student portal.

We were honoured to launch the Dikgang Moseneke Excellence Scholarship in 2022. This bursary, part of the UP Faculty of Law's flagship Moseneke Legacy Project, supports the studies of a new generation of African law students to advance the vision of a liberated, non-racist and non-sexist South Africa and Africa.

Following a request from the Student Representative Council (SRC) in March, the Executive agreed to make available a limited amount of funding to students who required data to complete their academic work. These are students who cannot access facilities and infrastructure on any of the UP campuses.

7.11 High-Profile Events

As the first post-pandemic year, 2022 marked the start of a busy year, with numerous initiatives and projects being launched.

7.11.1 Launches

Pan-African Cancer Research Institute (PACRI)

Funded by UP, the South African Medical Research Foundation (SAMRC) and the National Research Foundation (NRF), PACRI aims to consolidate existing cancer research efforts and resources to provide a platform for research growth and development throughout South Africa, as well as internationally. This provides an opportunity to form multidisciplinary teams working under certain themes, which will tailor treatments to individual patients, thus facilitating precision oncology treatment. The Centre will be headed by UP's Professor Zodwa Dlamini, who holds the SARCHI Chair in Precision Oncology and Cancer Prevention.

Sustainable Development Solutions Network (SDSN) South Africa National Network

The SDSN launch marked the beginning of SDSN South Africa's public presence. The event focused on the intention of the network and the nature of its future partnerships towards achieving the SDGs and the 2023 Agenda. The United Nations selected UP to host the SDSN in February 2021.

The South African Sustainable Development Goals Policy Support initiative

This initiative brings together the 26 public universities and government policymakers within the Presidency of the Republic of South Africa to strengthen policymaking. The South African SDG Hub, hosted by UP's Albert Luthuli Leadership Institute, is a national resource that was launched to enable policymakers to access and understand the most useful research on the SDGs, in order to develop and implement more impactful policies. The hub functions as a meta-platform, aggregating the best and most relevant research on SDGs from South African and selected non-South African universities.

National Biosecurity Hub

The hub is an initiative of the Department of Science and Innovation's Agricultural Bio-economy Innovation Partnership Programme. It will facilitate collaborative efforts in the national system of innovation to help prevent, reduce and manage crop and animal disease, and other matters related to food safety in South Africa. It will be coordinated by Innovation Africa @UP.

Centre for Language Learning

The Centre aims to develop the English language skills of international students who hail from countries where English is not an official language, in order to strengthen their ability to study and work in an English-speaking environment. There are plans to expand the number of courses offered by the Centre. The launch event included ambassadors from Angola, Brazil, Cameroon, China, Congo, Equatorial Guinea, France, Gambia, Madagascar, Mexico, Mozambique, Portugal, South Korea, Spain, Sweden, Switzerland and the USA.

African Centre for the Study of the United States at UP (ACSUS-UP)

This is the second ACSUS centre to be opened in Africa. ACSUS-UP's core activities will include research in various cross-cutting disciplinary areas, namely geopolitics and geostrategy, food security, water and energy, one health, inequalities, social justice and human rights.

Research Matters and Re.Search magazine

Research Matters and *Re.Search* magazine provide ideal platforms to highlight a cross-section of UP's achievements. As researchers communicate their findings in accessible ways, their chances of influencing policy and public understanding of science increase. Educating the public on why rigorous scientific endeavour is necessary is even more critical in a time when non-scientific views, which could have disastrous consequences, are gaining popularity.

TransAwareness website

The Faculty of Law's Transformation Committee initiated and drove this awareness campaign, which seeks to promote more inclusive facilities for all staff and students, regardless of gender identity, and to prevent discrimination against, and exclusion of, transgender individuals.

Mamelodi Business Hub (MBH)

UP hosted the launch of the Mamelodi Business Hub in collaboration with UNICEF and PwC. The MBH (formerly the Mamelodi Business Clinic) was established by the Department of Business

Management and became a crucial role player in implementing community development initiatives. The primary purpose of the MBH is to develop entrepreneurs in the local community.

New alumni chapter

The Alumni Relations Office launched a new alumni chapter for UP graduates who have been recipients of the Vice-Chancellor's Distinguished Merit Award (VCDMA). The VCDMA was launched in 2016 and grants funding to top scholars for the duration of their undergraduate studies.

BRIDGES Sustainability Science Coalition

BRIDGES is the global sustainability science coalition of the United Nations Educational, Scientific and Cultural Organisation's (UNESCO's) Management of Social Transformations Programme (MOST). A principal aim of the coalition is to support closer collaboration among the hard and natural sciences, the social sciences, the humanities, and the arts.

7.11.2 Events

Sustainability Research and Innovation Congress 2022 (SRI2022)

A joint initiative of Future Earth and the Belmont Forum, SRI is an emerging global platform of advocacy for sustainability scholarship and innovation, transdisciplinary and cross-sectoral collaboration, and knowledge to action. The event was a success, with over 1 350 participants.

Pamoja project

In May 2022, UP and the Embassy of Sweden co-hosted an event to celebrate democracy and the activism that keeps it responsive. The event was hosted at the Future Africa Campus. The Pamoja project is an innovative web-based experience that documents Sweden's role in the fight for democracy and human rights across the continent. The project partners – the Swedish Institute, Liliesleaf Foundation and the Embassy of Sweden – launched the site to show how international solidarity can inspire younger generations to tackle today's challenges.

2022 Mail & Guardian 200 Young South Africans list

UP was proud to host some of the 22 individuals associated with UP who featured on the list of promising young professionals under the age of 35. Since the inaugural awards in 2005, 137 UP alumni and alumni associates have made an appearance on the 200 Young South Africans list.

7.12 Arts and Sports

7.12.1 Arts

After 750 days of operating under the national lockdown, the UP Museums celebrated the return to normality with the official launch of the Mapungubwe Archive in partnership with the US Ambassadors Fund for Cultural Preservation. This was followed by the much anticipated permanent installation of *The discovery of the sea route circumnavigating Africa* (1959-1962) by Alexis Preller in

partnership with Craig McCleneghan Architecture and with due acknowledgement to the Gauteng Department of Infrastructure and Development.

Another high point was the final location of the much-talked-about female figure of the Rain Goddess by Willem de Sanderes Hendrikz. This magnificent bronze sculpture now stands proudly outside the Old Merensky Building and was a generous long-term donation made by Nedbank Limited.

Principal's Concert

In September, UP hosted the much-anticipated annual Principal's Concert after a two-year hiatus. The concert was held on the Aula Lawn of the Hatfield Campus under the theme 'Ukuthula: Celebration of peace', a symbol of unity in the University community's collective struggle to make the world a better place for all.

Over 900 guests enjoyed an offering of various genres of music from Africa and beyond by the UP Symphony Orchestra, the UP Aula Cultural Ensemble, the Onderstepoort Community Choir, the UP Chorale, and the UP Camerata.

Artful insight

Fine Arts master's student Danielle Oosthuizen's collection 'After nature' is the result of a two-year collaboration with the UP Institute for Sustainable Malaria Control. The exhibition was held over two days in the Student Gallery at the Javett-UP Art Centre as part of Oosthuizen's examination process.

The impact of art on a scientific topic is unique and is creating new opportunities to make research more accessible to people from various backgrounds.

The artworks were born from transdisciplinary collaborations, where science and social science researchers worked together to create provocative and informative malaria-focused messages.

7.12.2 Sport

If the University of Pretoria had been considered Africa's sporting powerhouse in previous years, its athletes took centre-stage in the world in 2022. Highlights of their international achievements are listed below.

7.12.2.1 Birmingham Commonwealth Games

Just when we thought that TuksSport could not improve on its Olympic success of 2021, our athletes went on to excel at the Birmingham Commonwealth Games, winning 11 of the 27 South African medals and contributing 40% of the medal tally.

Tuks swimmers were responsible for seven of the 11 medals won during the Games. Olympic champion, Tatjana Schoenmaker, won gold in the 200m breaststroke and silver in the 100m breaststroke. Pieter Coetzé was Tuks's other gold medallist. He won the 100m backstroke and went on to win silver in the 50m backstroke and bronze in the 200m backstroke. In 2021, he made history by being the youngest South African male swimmer to compete at the Tokyo Olympics at the age of 17.

Erin Gallagher won silver in the 50m butterfly event, while Kaylene Corbett took bronze in the 200m breaststroke.

By winning gold and bronze medals in the 200m breaststroke at the Birmingham Commonwealth Games, Tatjana Schoenmaker and Kaylene Corbett achieved a first for South African swimming: they are the first female swimmers to win medals for their country in the same event at the Commonwealth Games since 1994.

Michaela Whitebooi won gold in the judo under-48 kg category, while Charné Griesel won bronze in the under-52 kg category. For Ms Whitebooi, her success had been ten years in the making after joining TuksJudo in 2012.

Jovan van Vuuren won bronze after jumping 8,06m in the long-jump event. It is only the third time since 1994 that a South African long jumper has won a medal at the Commonwealth Games.

TuksAthletics' Zeney van der Walt won bronze in the 400 m hurdles during the Games, setting a new personal best with her time.

7.12.2.2 Other TuksSport highlights

Swimming: Eighteen-year-old Tuks swimmer Pieter Coetzé won five gold, two silver, and three bronze medals in backstroke events at the Mare Nostrum Swim Series in Europe. A definite highlight was beating the former Olympic gold medallist, Michael Anderson (USA), in the 50m backstroke. He also outswam Britain's Luke Greenbank over 200m. Greenbank has won medals at the Olympic Games and World Championships.

Pieter Coetzé also proved to be the star of the South African team at the World Junior Swimming Championships in Lima, Peru where he won one gold, three silver and a bronze medal.

Archery: Tuks's archers made a near clean sweep during the African Championships hosted by UP, winning no fewer than five gold medals. Wian Roux won the men's recurve competition by outshooting Eyeni Frank (Côte d'Ivoire) in the final. He was also part of the South African team that won gold.

The men's compound final was an all-Tuks affair. Christian de Klerk faced off against Richard Anderson, with De Klerk taking gold and Anderson silver. De Klerk also teamed up with Anderson and his father, Mr Beyers, to win the team competition, and went on to win gold in the mixed-team event as well.

Women's Sevens rugby: Eight Tuks players were selected to play for the Springbok Women's Sevens team. They were in action at the Commonwealth Games, the World Cup Tournament and a World Qualifier Tournament.

Athletics: Tuks athletes won three gold, seven silver and three bronze medals during the Africa Championship held in Mauritius.

At the World Junior Championships in Cali, Columbia, 18-year-old Benjamin Richardson won a bronze medal in the 100m. It is the second time in two years that he has medalled at Junior World Championships. Richardson is also the South African under-20 champion over 100 and 200 metres.

Varsity Sports: On the local front, TuksHockey made history when their women's and men's teams clinched Varsity Tournament titles within hours of each other. This was the first time this has happened in the history of Varsity Sports.

Thanks to TuksHockey's heroics, UP won four of the eight completed Varsity Tournaments. In addition to the two hockey tournaments, the Tuks rugby team won the Varsity Cup Tournament, and the Tuks under-20 rugby team was the Varsity Young Guns Champions.

7.13 Self-Assessment

The University's performance is assessed in terms of a list of identified core performance indicators as shown and discussed in Part B of this report (Performance Report).

I can affirm that we are well on our way towards achieving our goal to strengthen the University's research, international profile, and global engagement, and, as one of South Africa's premier universities, we are also one of the largest producers of research in the country. More importantly, our research matters because it is aimed at changing lives, as we strive to achieve greater societal impact by creating knowledge that addresses local and global challenges.

As reported in Section 3.4.1.3 and 7.7.1, the University strengthened its position in the world rankings in 2022. In 2022, the University registered its best performance thus far in the THE Impact Rankings where the University was placed among the top 150 universities in the world. Of the 21 disciplines in which UP was ranked this year in the QS Subject Rankings, eight are rated first in South Africa, up from two in 2019.

A further measure is the 605 NRF-rated researchers in 2022, an improvement from 592 in 2021. We had 17 A-rated researchers and 104 B-rated researchers. We not only benefit from the gravitas of our internationally recognised A-rated researchers, but are pleased that our pipeline of talent is constantly replenished by our P-rated researchers (under 35 years of age) and Y-rated researchers (under 40 years of age).

The University's approach to international partnerships has been revitalized to ensure that they focus on research excellence in areas of institutional research strength and focus, are designed for relevance and impact, and are synergistic and complementary.

The University's fundraising is on an upward trajectory. In 2022, we raised R250 million against a target of R170 million (stretch target of R200 million). As mentioned previously, the University successfully ran its first Giving Day Campaign, which was held on 25 July 2022. The campaign raised over R19 million from over 400 donors, many of them first-time donors, contributing on the day. The event will be held again in 2023, with a view to it becoming an annual feature as part of our initiatives to support UP students financially.

Another significant milestone is the launch of the UP US Charitable Foundation and the University's Charitable Trust in the United Kingdom. The University's advancement performance has been recognised in the Annual Survey of Philanthropy in Higher Education (*ASPIHE*) where UP's total income represented the largest institutional philanthropic income of universities in South Africa.

7.14 Appreciation

The University was honoured to appoint Emeritus Justice Sisi Khampepe as the new UP Chancellor on a five-year term with effect from 28 June 2022. Justice Khampepe embodies all the values which

we espouse at UP, and we are truly grateful to have this extraordinary South African icon as our Chancellor.

Much appreciation goes to the Chairperson of Council, Mr Kuseni Dlamini, and every Council member for their support throughout a year that saw us redouble our efforts to be responsive, proactive and pioneering on so many levels. Together we fully embraced all the opportunities that arose from the pandemic's adversity.

In conclusion, I would like to pay tribute to the following leaders who retired during 2022.

Prof Norman Duncan, Vice-Principal: Academic. He set new benchmarks not only for oversight but also for promoting the interests of the faculties consistently while holding them to account when necessary. His passion, thinking and initiatives in teaching and learning were palpable. Part of his passion was promoting young people and treating them with empathy.

Prof Wiseman Nkuhlu ended his term of office as Chancellor in June 2022. Prof Nkuhlu was inaugurated as the Chancellor of the University of Pretoria in March 2007 and served three terms from 2007 to 2022. We are grateful for Professor Nkuhlu's outstanding contribution and commitment to the University over the past 15 years. He leaves behind an indelible legacy and an institution that is stronger than ever before, having benefited from his valuable contribution as one of the most influential South Africans of our time. We are deeply grateful that his stature elevated the standing of the University in South Africa and globally.

1. Kare

21-06-23

Date

Prof T Kupe Vice-Chancellor

PART B

8. PERFORMANCE IN 2022

Table 8.1 provides an overview of the University's performance in 2022 against Council-approved core indicators. The indicators assess important outcomes for UP as stipulated in UP 2025, the 2022 – 2026 Strategic Plan and the 2022 Implementation Plan. Overall, there have been several positive changes in line with the University's strategic goals, targets and objectives, with clear evidence that there was a distinct shift in progress in the 2022 implementation cycle. The University met and exceeded the targets for five indicators and registered growth in the doctoral headcount enrolment, even though the target was not realised. The University did not meet its targets in several areas, including total weighted research outputs per academic FTE staff, master's enrolments, percentage registrations in the science, engineering and technology (SET) fields of study (contact students) and the number of graduates in scarce skills areas.

	PERFORMANCE INDICATORS	2019	2020	2021	2022	Target 2022	Target realisation
1	% Academic staff with doctoral degrees (excluding joint appointments)	67.68	68.8	70.4	70.9	69.41	1
2	% Black staff (Department of Labour EE definitions)	65.0	66.6	67.6	69.1	67.50	1
3	Total weighted research outputs per academic FTE staff*	2.46	2.29	2.52	2.24	2.70	Ļ
4	First-time entering undergraduate headcount enrolments*	8 989	8 335	9 348	8 469	7 903	1
5	Total undergraduate headcount enrolments*	35 746	35 820	37 233	37 075	37 186	Ļ
6	Master's headcount enrolments*	6 239	6 248	6 318	6 190	6 719	
7	Doctoral headcount enrolments*	2 375	2 411	2 537	2 586	2 593	
8	Number of graduates in scarce skills areas (excluding distance education)*	5 242	5 169	5 545	5 173	5 850	Ļ
9	% of black contact students to total contact students*	59.45	60.58	62.57	64.69	62.88	1
10	% registrations in SET (contact students)*	52.85	51.72	49.96	48.88	54.00	Ļ
11	% successful FTE students to total FTE enrolments*	83.74	86.73	85.83	83.76	85.36	Ļ
12	FTE contact students per FTE teaching staff member*	24.59	23.62	24.20	22.86	26.20	1

Target achieved

Target not achieved

Target not achieved but there was improvement from 2019 to 2022 or the 2022 performance was very close to the target

*HEMIS

Total weighted research outputs: The indicator includes all journal publication outputs, the research component of master's graduate and doctoral graduates outputs. It does not include books, book chapters and conference proceedings.

The University registered a strong performance with regard to growth in the proportion of academic staff with doctoral degrees, the proportion of black staff and black contact students, and the academic staff-to-student ratio. Figure 8.1 shows that the percentage of academic staff with doctorates has consistently grown over the years. In 2022, 70.90% of UP's academic staff had doctorates compared to 70.40% in 2021.

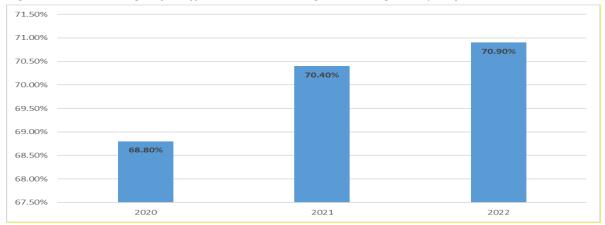


Figure 8.1 Percentage of staff with doctoral degrees as highest qualifications

The growth in the percentage of black staff (Department of Labour EE definitions), from 67.60% in 2021 to 69.10% in 2022, is aligned with the University's transformation agenda. The University's diversity profile was strengthened further by the increase in the proportion of black contact students to total contact students. As shown in Figure 8.2, the proportion of black contact students at UP has maintained a steady growth over the years and increased by 2.12 percentage points between 2021 and 2022.

We are committed to ensuring that transformation permeates every aspect of UP: ensuring that UP is home to student and staff populations that represent South Africa's rich diversity; providing the conditions necessary for our diverse campus community to feel welcomed, supported, included and valued, and to thrive academically and as researchers.

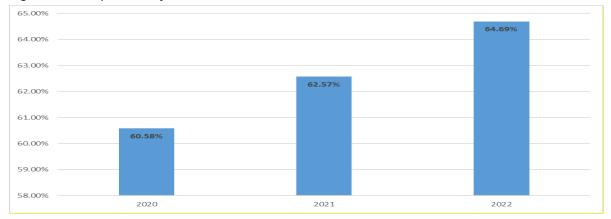


Figure 8.2 Proportion of black contact students to total contact students

The improvement in the academic staff-to-student ratio of 22.9 for 2022 (Figure 8.3) is notable. Reducing the academic staff-to-student ratio remains a top priority for the University. Academic staff FTEs increased from 1711.13 in 2021 to 1748.64 in 2022. The University is exploring various opportunities to strengthen its academic workforce and ensure that staff-to-student ratios are within the set targets.

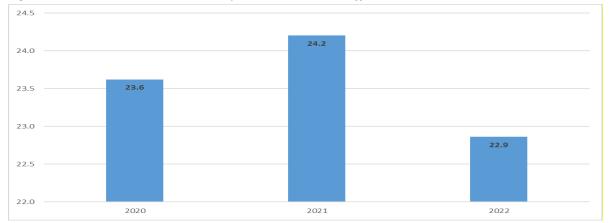


Figure 8.3 Total contact FTE students per FTE academic staff (ratio)

The University missed its target of total undergraduate enrolment (37 186) by 111 students. The University's actual teaching input units (TIUs) for 2022 were below the planned TIUs by 1.7%, which is within the deviation of 2% allowed by DHET. TIUs are the weighted measure that generate the teaching input subsidy for the University. They are generated by the credit values of modules, the distribution of module enrolment across the four funding groups, study levels and the teaching mode.

The University did not meet its 2022 target (2.70) for total weighted research outputs per academic FTE staff. This below target performance was mainly the result of a decline in weighted master's and doctoral research output units, from 2270.13 in 2021 to 2006.19 in 2022 (a decrease of 263.94 units) and also a decline in research units from journals, from 2047.59 units in 2021 to 1902.88 units in 2022 (a decrease of 144.71 units).

The percentage successful full-time equivalent (FTE) students to total FTE enrolments is an important indicator of the effectiveness of teaching and learning. After registering a strong performance in 2020 and 2021, when the University adopted remote teaching and learning due to the COVID-19 pandemic, the University's performance against this indicator in 2022 mirrors pre-COVID-19 levels and did not meet the set target of 85.36%. It is apparent that the stronger student success levels registered during the COVID-19 years are not a reliable basis for projecting continued improvement. Accordingly, the 2020 and 2021 student success results can be considered as outliers. They are probably the result of the conditions under which assessments took place under the COVID-19 lockdown conditions. The University has implemented a multi-pronged strategy to enhance student success, the main driver of this strategy being the FLY@UP initiative discussed in Section 3.3.2.

Postgraduate education is central to broadening the University's research base and thus the strategic priority to increase postgraduate enrolment, particularly in master's and doctoral programmes. Doctoral enrolments have consistently grown, including in 2022, but lagged the target by seven students. However, master's enrolments declined compared to the previous year (2021) and did not reach the set target (see Figure 8.4). The reasons for the decline in master's enrolments relate mainly to funding challenges. The challenging economic environment has impacted industry funding for postgraduate student bursaries. The number of students awarded full NRF bursaries has declined with the revised policy and increased amounts per bursary leading to fewer awards. Furthermore,

with the winding down of Centres of Excellence and SARChI Chairs, the bursaries that were linked to these programmes are no longer available.

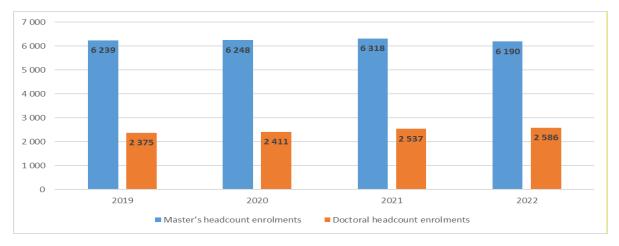


Figure 8.4 Master's and doctoral headcount enrolments, 2019-2022

As shown in Table 8.1, the targets for the number of graduates in scarce skills areas and registrations in Science, Engineering and Technology (SET) were not met. The number of graduates in the various scarce skills fields is presented in Figure 8.5 below.

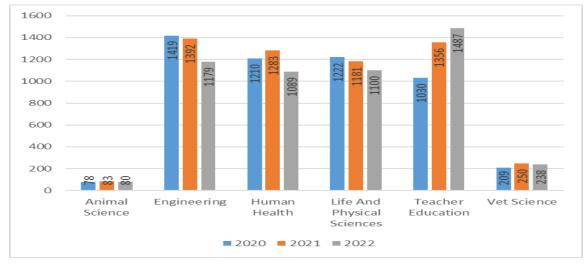


Figure 8.5 Number of contact graduates in scarce skills fields, 2020–2022

Only teacher education recorded consistent growth in the number of graduates over the three-year period (2020 to 2022), with engineering recording the opposite trend and the highest decline in the number of graduates (240). The University's student success initiatives will aim to improve throughput rates in the various scarce skills study programmes.

8.1 Concluding Comment

The University has achieved tremendous success since the implementation of the UP 2025 strategy. These achievements strengthen our position as a strong, innovative and socially responsive university. The achievements of 2022 have built on these successes and will go a long way towards

realising the University's vision and strategic goals. The various areas where the University did not achieve its targets are a reminder of the effort, creativity, innovation and resources that are required to drive the realisation of the University's vision and strategic goals.

1. Cife

Prof T Kupe Vice-Chancellor

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21-06-23

Date

2023 2

Date

Mr KD Dlamini Chairperson of Council

PART C

9. FINANCIAL REVIEW

9.1 Financial Environment

The higher education sector operates in an environment of complexity and uncertainty. Over the past decade the University has been required to navigate the #FeesMustFall student protests, the subsequent compact on fee increases, the issues surrounding NSFAS funding, the COVID-19 pandemic and the resultant decline in the South African economy. In the past year, the macro-economic outlook has taken further strain due to international political events leading to a global decline in economic growth, rising inflation and tighter monetary policies. As a consequence, the University continues to operate at a higher risk with a large focus on financial sustainability, which is listed as the number one risk in the University's Strategic Risk Register.

The Financial Sustainability Plan of the University performs an important role in guiding the University through these complex issues. The key focus areas of the plan are the maximisation of operational efficiencies, cost containment, cost replacement and the enhancement of all income streams. It is also used as a navigational marker to expand the number of academic staff, thereby improving the academic staff-to-student ratio. The allocation of resources at the University is coordinated by the Strategic Planning and Allocation of Resources Committee (SPARC) and prioritised in accordance with the University's strategic goals and Financial Sustainability Plan.

9.2 Budget Model, Process and Strategic Alignment

The University's priorities are reflected in its long-term strategic plan, five-year plan, annual implementation plans and financial sustainability plan, which are used as the basis for the preparation of the budget. The budget is prepared after a consultative process involving interactions with deans of faculties and directors of professional service departments.

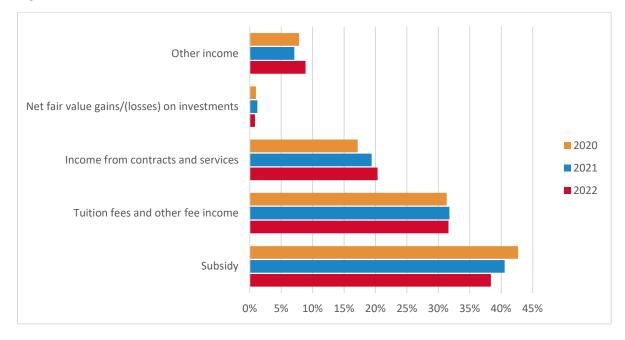
The budget process incorporates two significant phases; the first being an allocation of operating costs in line with past experience and on-going operational needs. The second phase involves a strategic allocation of resources based on a competitive process between faculties and professional services. In this regard, Deans and Directors are requested to prepare plans for the next year for their faculties and departments, respectively. The plans are presented to and approved by the Executive. The outcome of this two-phased approach provides input into the final budget, which is presented to Council for approval.

Budget control is embedded in the enterprise-wide financial system that is designed to ensure that budgeted expenses are not exceeded and that all commitments are ring-fenced from available funds. Budget updates, which monitor actual results against budgeted figures, are considered by the Executive on a quarterly basis and unexplained variations are investigated and cleared.

9.3 Revenue

An analysis of the University's main revenue streams over the past three years is provided in Figure 9.1. The analysis indicates that subsidy income (including restricted earmarked grants) continues to account for a smaller proportion of total income, declining by 4.3% over the lasts three years.

Figure 9.1 UP income sources, 2020–2022



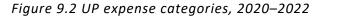
Tuition fees and other fee income have also shown limited growth due the fee compact. The Department of Higher Education and Training (DHET), in consultation with Universities South Africa (USAf), capped the tuition fee increase for 2022 at 4.23% and accommodation fees at 6.23%.

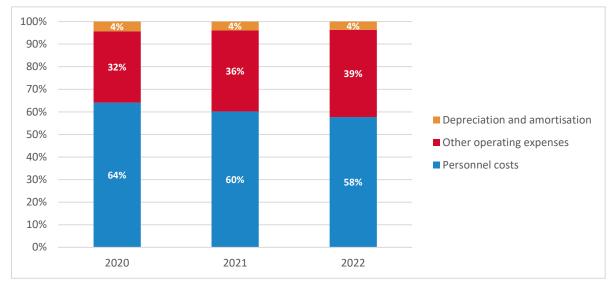
The increase in income from contracts and services produced minor growth in real terms, the increase is mainly due to the release of deferred revenue from prior years.

Other income includes income from donations and gifts and income from interest and dividends. Income from donations and gifts improved during 2022, with an increase of 29.4%. Income from interest and dividends improved despite volatile financial markets.

9.4 Expenses

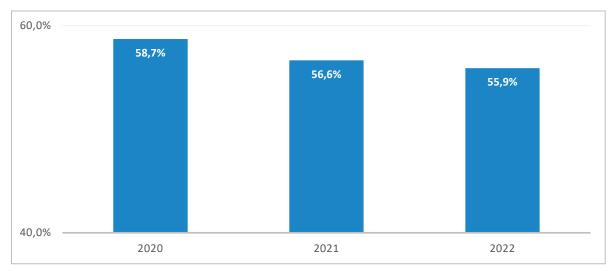
An analysis of the University's major expense categories and their proportion to total expenses is provided in Figure 9.2.





Operational expenses (excluding depreciation) as a percentage of total expenses increased in 2022 due to the return to normal activities as a result of the ending of COVID-19 lockdown regulations, the rising costs of diesel purchases and cost pressures experienced as a result of the high inflation. Personnel costs (on a consolidated basis) as a percentage of total expenses decreased from 64.1% in 2020 to 57.7% in 2022 as a result of the increase in operating costs. The ratio of personnel costs to total revenue, over the past three years, is as shown in Figure 9.3.

Figure 9.3 Personnel costs/annual revenue, 2020–2022



Personnel costs as a percentage of revenue has decreased in 2022 due to a decrease in the leave pay provision. The overall reduction is also attributed to progress made towards targets in the Financial Sustainability Plan.

9.5 Financial Sustainability

Three indicators are used to monitor the University's financial sustainability: current ratio, sustainability ratio and cash flow ratio. The University's performance against these three indicators is presented in Figure 9.4.

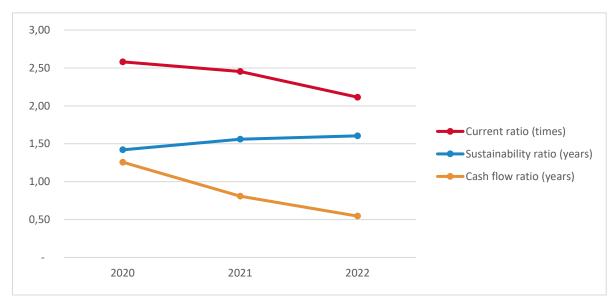


Figure 9.4 UP current ratio, sustainability ratio and cash flow ratio, 2020–2022

Current ratio

The resources at the University's disposal should be sufficiently liquid to enable it to meet its shortterm needs. To assess the liquidity of the University, the ratio of available short-term funds to shortterm obligations is used. The data on the University's liquidity position indicate that it is in a satisfactory position. Short-term cash reserves were maintained at higher levels in 2020 and 2021 due to the uncertain economic climate and possible delays in the payment of Government and NSFAS funding. The ratio has since decreased due to lower working capital requirements. The ratio indicates that the short-term funds at the University's disposal were sufficient to cover the short-term liabilities.

Sustainability ratio

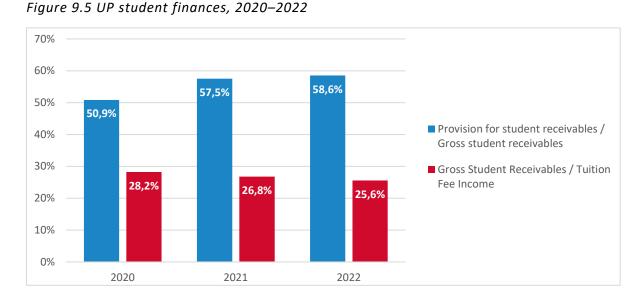
The sustainability ratio depicts the ability of the University to continue with its core business without new revenue in the next financial year. It is calculated by comparing the University's cumulative Council-designated reserves to total annual expenses. This ratio indicates that the University will be able to continue for 18 months with its activities without new revenue being generated.

Cash flow ratio

This ratio, calculated as cash flow from operations/current liabilities (excluding deferred income), is a measure of cash management performance. This ratio indicates that the University has sufficient cash resources to fund expenses for at least six months without further cash injections.

9.6 Student Finances

Two indicators are utilised to monitor student receivables, namely, provision for student receivables as a proportion of gross student receivables and gross student receivables as a proportion of tuition fee income. The University's performance against these indicators is presented in Figure 9.5.



Gross student debt at the end of the financial year amounted to R673,6m (2021: R659,1m). The provision for bad debts on student receivables is 58.6% (2021: 57.5%) of gross student receivables. The provision has been increasing over past three years due to insufficient funding to support the missing middle students, the decline in the economy and the demand for fee-free higher education. The high levels of inflation experienced in 2022 also produced a cost-of-living crisis for South African households resulting in financial and debt instability.

The University has reviewed and updated its policy on providing for outstanding student fees and adjusted for the increase in outstanding student debt taking the above factors into account. The demand for student financial aid continues to outstrip the available resources.

Gross student receivables/Tuition fee income

Gross student receivables at the end of 2022 was 25.6% of total tuition fees income, which declined from 26.8% in 2021. The ratio in Figure 9.5 reflects the uncollected portion of tuition fee income at year end. Initiatives to curtail a disproportionate growth of outstanding student debt include:

- → Requiring students to pay a first payment at registration;
- → regular monitoring and increased contacting of students with outstanding debt;
- → handing over student accounts for debt collection in cases of long outstanding amounts;
- → charging a levy on default accounts to fund related legal tracing fees;
- \rightarrow requiring a 50% deposit for all first-time registering international students for tuition and accommodation fees; and
- \rightarrow limiting registrations to students with outstanding balances until settlement or conclusion of formal payment arrangements.

9.7 Investments

The University's investment funds serve three purposes, namely:

→ To meet part of the short-term requirements of the University – these liabilities have a maximum term of 24 months. The risk profile emphasises the need for capital protection over short periods and a high degree of liquidity;

- → to meet the long-term liabilities (5 years and more) of the University the main requirement here is a good investment return relative to inflation over the long term; and
- → to meet the requirements of a special class of the long-term liabilities being the post-retirement medical aid benefits.

The University aligns its investment philosophy to the term of the liabilities and the risk profile. To this end, three investment portfolios have been established:

- \rightarrow Money Market Portfolio;
- → Long-Term Capital Portfolio; and
- → Continuation Medical Aid Portfolio.

The University follows an investment strategy that rebalances between Long-Term Capital and Money Market portfolios according to the cash flow requirements of the University, based on a rolling working capital budget, which accounts for the cash flows of major projects over a rolling 15-month period.

An indication of the University's diversified investment portfolio over the past three years is provided in Figure 9.6 below. A significant proportion in foreign investments allowed for reasonable stability in the investment portfolio despite the volatile local financial markets, by limiting the risk of price fluctuations through leveraging foreign exchange gains.

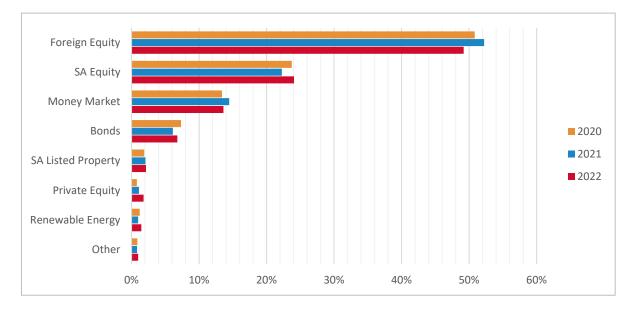


Figure 9.6 University's investment portfolio, 2020–2022

9.8 Concluding Comment

The University has displayed acceptable results for the financial year ended 31 December 2022, however, the disparity in the growth of income and expenses year-on-year is of concern. The University recorded a loss of R8 million for subsidised activities before transfers and had to rely on once-off reserves to fund the deficit.

The controls and measures relating to the Financial Sustainability Plan are essential to ensure that the University remains financially sustainable. The University will update the Financial Sustainability

Plan during 2023 to ensure that targets reflect the operating environment post COVID-19, while maintaining the focus on measures to limit the growth of expenditure, utilise resources efficiently and attract a greater proportion of third-stream income. These measures are of critical importance to alleviate the funding constraints from first- and second-stream income.

ownt C Koornhof xecutive Director Mr BJ Kruger

21-06-2023

Date

21-06-2023

Date

Chairperson of the Executive Committee of Council

10. APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS

Council is responsible for the preparation, integrity and fair presentation of the financial statements of the University of Pretoria.

The consolidated financial statements accompanying this Annual Report for 2022, have been prepared in accordance with section 41 of the Higher Education Act 101 of 1997, as amended. Council also prepared other information as required to be included in this Annual Report and is responsible for both its accuracy and consistency with the consolidated financial statements.

The 'going concern' approach was followed in the preparation of the consolidated financial statements. Based on forecasts and available cash resources, Council believes that the University of Pretoria will remain a 'going concern' in the foreseeable future. The viability of the institution is supported by the content of the consolidated financial statements.

The consolidated financial statements have been audited by Ernst & Young Incorporated who were given unrestricted access to all financial records and related data, including the minutes of meetings of Council and all its committees. Council believes that all representations made to the independent auditors during their audit were valid and appropriate.

Approval of the Consolidated Financial Statements

The consolidated financial statements for the year ended 31 December 2022, set out in Annexure A were approved by Council on 21 June 2023 and signed on its behalf by:

Prof T Kupe

21-06-23

Date

Mr KD Dlamini Chairperson of Council

06/2023

Date

Annexure A

CONFIDENTIAL

Consolidated Financial Statements of

the University of Pretoria

for the year ended 31 December 2022





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INDEPENDENT AUDITOR'S REPORT TO THE MINISTER OF HIGHER EDUCATION SCIENCE AND INNOVATION AND THE COUNCIL ON THE UNIVERSITY OF PRETORIA

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Opinion

We have audited the consolidated financial statements of the University of Pretoria and its subsidiaries (the University) set out on pages 138 to 196, which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, as well as the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the University as at 31 December 2022 and its consolidated financial performance and consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards and the requirements of the Higher Education Act of South Africa, 1997 (Act no. 101 of 1997) (HEA).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the University in accordance with the Independent Regulatory Board for Auditors' Code of Professional Conduct for Registered Auditors (IRBA Code) and other independence requirements applicable to performing audits of financial statements in South Africa. We have fulfilled our other ethical responsibilities in accordance with the IRBA Code and in accordance with other ethical requirements applicable to performing audits in South Africa. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Council for the consolidated financial statements

The Council is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards and the requirements of the HEA and for such internal control as the Council determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Council is responsible for assessing the University's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the Council either intends to liquidate the University or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is included in the annexure to this auditor's report. This description, which is located at page 137, forms part of our auditor's report.

Other matter

The consolidated financial statements of The University of Pretoria and its subsidiaries ('the University') for the year 31 December 2021 were audited by another auditor who expressed an unmodified opinion on those financial statements on 29 June 2022.



REPORT ON THE AUDIT OF THE ANNUAL PERFORMANCE REPORT

Introduction and scope

In accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA) and the general notice issued in terms thereof, we have a responsibility to report on the usefulness and reliability of the reported performance information against predetermined objectives for selected objectives presented in the annual performance report. We performed procedures to identify material findings but not to gather evidence to express assurance. Accordingly, we do not express an opinion or conclusion on these matters.

Our procedures address the usefulness and reliability of the reported performance information, which must be based on the University's approved performance planning documents. We have not evaluated the completeness and appropriateness of the performance indicators included in the planning documents. Our procedures did not examine whether the actions taken by the University enabled service delivery. Our procedures also did not extend to any disclosures or assertions relating to the extent of achievements in the current year or planned performance strategies and information in respect of future periods that may be included as part of the reported performance information. Accordingly, our findings do not extend to these matters.

We evaluated the usefulness and reliability of the reported performance information in accordance with the criteria developed from the performance management and reporting framework, as defined in the general notice, for the following selected objectives presented in the University's annual performance report for the year ended 31 December 2022:

Objectives	Pages in the annual performance report
Strategic goal 1: To enhance access and successful student learning	118 - 122

We performed procedures to determine whether the reported performance information was consistent with the approved performance planning documents. We performed further procedures to determine whether the indicators and related targets were measurable and relevant, and assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.

We did not identify any material findings on the usefulness and reliability of the reported performance information of the selected objective mentioned above.

Other matter

We draw attention to the matter below.

Achievement of planned targets

Refer to the annual report on pages 118 and 122 for information on the achievement of the planned targets for the year.

REPORT ON THE AUDIT OF COMPLIANCE WITH LEGISLATION

Introduction and scope

In accordance with the PAA and the general notice issued in terms thereof, we have a responsibility to report material findings on the University's compliance with specific matters in key legislation. We performed procedures to identify findings but not to gather evidence to express assurance. Accordingly, we do not express an opinion or conclusion on these matters.

We did not identify any material findings on compliance with the specific matters in key legislation set out in the general notice issued in terms of the PAA.

OTHER INFORMATION

The Council is responsible for the other information. The other information comprises the information included in the 196page document titled "Annual Report and Audited Financial Statements of the University of Pretoria". The other information does not include the consolidated financial statements, the auditor's report and those selected objectives presented in the annual performance report that have been specifically reported on in this auditor's report.



Our opinion on the consolidated financial statements and our findings on the reported performance information and compliance with legislation do not cover the other information and we do not express an audit opinion or any form of assurance conclusion on it.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements and the selected objectives presented in the annual performance report, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

INTERNAL CONTROL DEFICIENCIES

We considered internal control relevant to our audit of the consolidated financial statements, reported performance information and compliance with applicable legislation; however, our objective was not to express any form of assurance on it. Accordingly, we do not express an opinion or conclusion on these matters.

We did not identify any material findings on internal control deficiencies.

OTHER REPORTS

We draw attention to the following engagements conducted by various parties which had, or could have, an impact on the matters reported in the University's consolidated financial statements, reported performance information, compliance with applicable legislation and other related matters. These reports did not form part of our opinion on the consolidated financial statements or our findings on the reported performance information or compliance with legislation.

Audit-related services

Various engagements were conducted to perform agreed-upon procedures or special purpose audits as requested by donors during the year ended 31 December 2022. These engagements were performed at the request of various entities providing funds to the University and covered periods ranging from 1 January 2022 to 31 December 2022. The details of these engagements are as follows:

Agreed-upon procedures in terms of International Standards on Related Services 4400 (Revised):

- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Planning, Monitoring and Evaluation Support Programme Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Centre for Visual Impairment Studies Teaching and Learning Development Capacity Improvement Programme Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Oppenheimer Chair for Emerging African Scientists in Non-invasive Wildlife Research Grant, as required by the BRO Trust.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Infrastructure Efficiency (Phase III - V) Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Extramural Units and Self-Initiated Research Grants, as required by Medical Research Council.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Anglo chair of Pyrometallurgy Grant, as required by the Anglo Operations Proprietary Limited.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Oppenheimer Endowed Fellowship in Molecular Archaeology Grant, as required by the BRO Trust.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the National Research Foundation grants, Scholarships and Grant Deposits awarded to institutions, as required by the National Research Foundation for their process to determine the University's subsidy for future periods.



- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Centre of Excellence National Research Foundation Wingfield Grant, as required by the National Research Foundation for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Centre for Sexualities, Aids and Gender and Irish Aid Partnership 5-Year Strategy Grant, as required by the Government of Ireland: Embassy of Ireland.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the York Timbers Chair in Data-Driven, Wood Structural Engineering for a Sustainable Built Environment and African Bio-Economy Grant, as required by the York Timbers (Pty) Limited.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Gauteng Province Department of Health and Facilities on the Joint Appointments Liability.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the BRICS-ICT Alliance for Smart Resource Utilisation to Combat Global Pandemic Outbreaks Grant, as required by the South African Medical Research Council.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on New Generation of Academic Programme Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on Veterinary Science Grant, as required by the Department of Higher Education for their process to determine the University subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on University Capacity Development Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on University Capacity Development Grant Collaborative Programmes, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on Foundation Programmes Grant, as
 required by the Department of Higher Education for their process to determine the University's subsidy for future
 periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on Nurturing Emerging Scholars Programme Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on Clinical Training Health Sciences Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the University Capacity Development Grant Gordon Institute of Business Science, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on funding from the Cancer Association of South Africa, as required by the Cancer Association of South Africa.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on Research Articles Grant, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Performance/Status Indicators from Technicon's and Universities, as required by the Department of Higher Education.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Centre of Sexualities AIDS grant from the Norwegian Students and Academics International Assistance Fund.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on funding from Bakeng Se Africa.



- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on funding from the North-West University.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on funding for Foodborne.

Agreed-upon procedures in terms of International Standards on Related Services 4400 (Revised) in progress and report not issued:

- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Student, Staff and Academic Programmes data, as required by the Department of Higher Education for their process to determine the University's subsidy for future periods.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Centre for Human Rights funding, as required by the African Coalition for Corporate Accountability.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Annual Financial and Operational Return, as required by the National Credit Regulator.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the Strengthening the University HIV/TB/STI Programmes Grant, as required by the Higher Education Training Health Wellness Development Centre.
- Engagement to perform Agreed-Upon Procedures Engagements (ISRS 4400) on the handling of NSFAS funds, as required by the National Student Financial Aid Scheme per their annual reporting requirements.

Special purpose audit in terms of International Standards on Auditing 805 (revised):

- Engagement to perform a special purpose audit of single financial statements and specific elements, accounts or items of a financial statement (ISA 805) on the financial statements of the Centre of Excellence a division of the University of Pretoria for funding from the National Research Foundation.
- Engagement to perform a special purpose audit of single financial statements and specific elements, accounts or items of a financial statement (ISA 805) on the financial statements of the Centre of Human Rights a division of the University of Pretoria.
- Engagement to perform a special purpose audit of single financial statements and specific elements, accounts or items of a financial statement (ISA 805) on the financial statements for the Enhancing Sustainable Groundwater use in South Africa project for funding received from the University of Copenhagen.

Special purpose audit in terms of International Standards on Auditing 805 (revised) in progress and report not issued:

• Engagement to perform a special purpose audit of single financial statements and specific elements, accounts or items of a financial statement (ISA 805) on the financial statements of the Centre for Mediation in Africa a division of the University of Pretoria for funding from the Norwegian Ministry of Foreign Affairs.

DocuSigned by: Ernst & Young Inc.

Ernst & Young Inc. Director: Kavinesh Manicum Registered Auditor 29 June 2023



ANNEXURE - AUDITOR'S RESPONSIBILITIES FOR THE AUDIT

As part of an audit in accordance with the ISAs, we exercise professional judgement and maintain professional scepticism throughout our audit of the consolidated financial statements, and the procedures performed on reported performance information for selected objectives and on the University's compliance with respect to the selected subject matters.

Consolidated Financial Statements

In addition to our responsibility for the audit of the consolidated financial statements as described in this auditor's report, we also:

- Identify and assess the risks of material misstatement of the consolidated financial statements whether due to fraud
 or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient
 and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from
 fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions,
 misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
 appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the
 University's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council.
- Conclude on the appropriateness of the Council's use of the going concern basis of accounting in the preparation of the consolidated financial statements. We also conclude, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the University to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements about the material uncertainty or, if such disclosures are inadequate, to modify our opinion on the consolidated financial statements. Our conclusions are based on the information available to us at the date of this auditor's report. However, future events or conditions may cause the University to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and determine whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the University to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

Communication with those charged with governance

We communicate with the Council regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2022

	NOTES	2022	2022	2021	2021
		R'000	R'000	R'000	R'000
ASSETS			26,149,523		26,677,041
NON-CURRENT ASSETS			22,276,998		22.670.733
Property, plant and equipment	1	6,558,591	, ,,,,,,	6,324,867	,,
Right-of-use assets	2	1,103		1,473	
Intangible assets	3	66,091		72,428	
Investments at fair value through other comprehensive income	4.1	13,796,266		14,377,329	
Investments at fair value through profit and loss	4.2	1,192,517		1,120,480	
Investment in associate companies	28	1,040		1,495	
Defined benefit pension plan	10.1	309,365		325,560	
Defined benefit medical plan	10.1	332,676		423,839	
Defined benefit/contribution provident plan	10.2	10,124		10,568	
Deferred taxation	5	49		198	
Loans and receivables	6	49 9,176		12,496	
Student loans	0	8,641		12,490	
				· · · · · ·	
Other receivables		535		535	
CURRENT ASSETS			3,872,525		4,006,308
Inventories	7	05.040	3,072,525	20,206	4,000,300
		25,842		30,206	
Investments at fair value through profit and loss	4.2	209,896		236,069	
Investments at amortised cost	4.3	-		2,600	
Receivables and prepayments	8	636,850		584,515	
Student receivables		270,521		268,061	
Other amounts		366,329		316,454	
Cash and cash equivalents	9	2,999,937		3,152,918	
FUNDS AND LIABILITIES			26,149,523		26,677,041
TOTAL FUNDS			21,584,833		22,200,607
NON-DISTRIBUTABLE RESERVES			21,001,000		,00,00.
Fair value reserve on specific purpose funds		3,391,595		5.462.352	
		0,001,000		5,402,002	
RESERVE FUNDS					
Restricted funds		6,205,031		6,084,850	
Specific purpose funds		1,242,993		1,367,817	
Property, plant and equipment funds		4,960,813		4,715,031	
Student accommodation funds		1,225		2,002	
Council designated funds		11,987,022		10,649,249	
Specific purpose funds		10,281,618		9,041,565	
Property, plant and equipment funds		1,705,404		1,607,684	
Council controlled unrestricted operating fund		1,185		4,156	
			1 605 507		4 744 000
	11	000	1,695,537	001	1,714,366
Lease liabilities Deferred income	11 13	682		221	
	13 10.4	1,618,477 76.378		1,635,713 78,432	
Group life assurance liability	10.4	/0,3/8		/8,432	
CURRENT LIABILITIES			2,869,153		2,762,068
Lease liabilities	11	615		1,479	
Trade payables, accruals and other liabilities	12	796,656		850,325	
Deferred income	13	857,039		939,958	
				189,385	
Contract liabilities	14	180.364		109.300	
Contract liabilities Student credits and deposits	14	180,364 430,213		403,169	

CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTES	COUNCIL CONTROLLED UNRESTRICTED OPERATING FUND	SPECIFICALLY FUNDED ACTIVITIES RESTRICTED & DESIGNATED	SUB-TOTAL	STUDENT ACCOMMODATION RESTRICTED	2022 TOTAL	2021 TOTAL
		R'000	R'000	R'000	R'000	R'000	R'000
TOTAL INCOME		5,158,420	2,677,464	7,835,884	493,031	8,328,915	7,748,286
State appropriations - subsidies and grants	17.1	2,871,819	322,692	3,194,511	-	3,194,511	3,141,990
Tuition and other fee income	17.2	2,150,749	-	2,150,749	482,339	2,633,088	2,461,987
Income from contracts and services	17.3	135,852	1,547,060	1,682,912	10,690	1,693,602	1,501,600
Donations and gifts	17.4	-	197,049	197,049	2	197,051	152,297
SUB-TOTAL: REVENUE	17.5	5,158,420	2,066,801	7,225,221	493,031	7,718,252	7,257,874
Interest and dividends	18	-	441,670	441,670	-	441,670	342,235
Net interest income on defined benefit/contribution plans	10,19	-	100,506	100,506	-	100,506	57,868
Profit/(loss) on disposal of property, plant and equipment		-	500	500	-	500	(2,616)
Net fair value gains on financial assets	20	-	68,442 (455)	68,442	-	68,442 (455)	93,242 (317)
Share of net (loss) of associates		-	(400)	(455)	-	(455)	(317)
TOTAL EXPENSES		5,166,487	1,932,026	7,098,513	373,156	7,471,669	6,833,408
Personnel	21	3,607,110	586,790	4,193,900	143,838	4,337,738	4,109,177
Leave cost accrued	21	(25,894)	(2,626)	(28,520)	4.448	(24,072)	2,140
Other operating expenses	22	1,306,345	1,336,670	2,643,015	215,938	2,858,953	2,400,364
Expected credit losses	6, 8	37,187	(21,731)	15,456	8,330	23,786	53,492
Depreciation and amortisation*	1, 2, 3	241,739	32,651	274,390	602	274,992	268,029
SUB-TOTAL: OPERATING EXPENSES		5,166,487	1,931,754	7,098,241	373,156	7,471,397	6,833,202
Finance expense		-	272	272	-	272	206
(DEFICIT)/SURPLUS BEFORE TAX		(8,067)	745,438	737,371	119,875	857,246	914,878
Tax expense	23		(46)	(46)		(46)	(3)
(DEFICIT)/SURPLUS FOR THE YEAR		(8,067)	745,392	737,325	119,875	857,200	914,875

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTES	COUNCIL CONTROLLED UNRESTRICTED OPERATING FUND	SPECIFICALLY FUNDED ACTIVITIES RESTRICTED & DESIGNATED	SUB-TOTAL	STUDENT ACCOMMODATION RESTRICTED	2022 TOTAL	2021 TOTAL
		R'000	R'000	R'000	R'000	R'000	R'000
(DEFICIT)/SURPLUS FOR THE YEAR		(8,067)	745,392	737,325	119,875	857,200	914,875
OTHER COMPREHENSIVE INCOME FOR THE YEAR		-	(1,472,974)	(1,472,974)	-	(1,472,974)	3,158,835
Items that will not be reclassified to profit and loss							
Remeasurements on defined benefit pension plan	10.1	-	(48,737)	(48,737)	-	(48,737)	52,632
Remeasurements on defined benefit medical plan	10.2	-	(146,976)	(146,976)	-	(146,976)	183,588
Remeasurements on defined benefit/contribution provident plan	10.3 10.4	-	(1,628)	(1,628)	-	(1,628) 11,088	(1,035)
Remeasurements on group life assurance plan Net fair value (losses)/gains on financial assets	20	-	11,088 (1,286,721)	11,088 (1,286,721)	-	(1,286,721)	(34,139) 2,957,789
Net fair value (losses)/gains on infancial assets	20	-	(1,200,721)	(1,200,721)	-	(1,200,721)	2,957,769
TOTAL COMPREHENSIVE (LOSS)/INCOME FOR THE YEAR		(8,067)	(727,582)	(735,649)	119,875	(615,774)	4,073,710

CONSOLIDATED STATEMENT OF CHANGES IN FUNDS FOR THE YEAR ENDED 31 DECEMBER 2022

	COUNCIL COUNCIL DESIGNATED AND REST CONTROLLED SPECIFIC PURPOSE FUNDS				D	COUNCIL DESIGNATED AND RESTRICTED PROPERTY, PLANT AND EQUIPMENT FUNDS				RESTRICTED	TOTAL FUNDS
	UNRESTRICTED OPERATING FUND	OPERATING FUND	LOAN FUND	ENDOWMENT AND SIMILAR FUNDS*	TOTAL	UNEXPENDED AND PPE RESERVES	RENEWAL AND REPLACEMENT	INVESTMENT IN PPE FUND	TOTAL PPE FUNDS	STUDENT ACCOMMODAT ION	
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
BALANCE AS AT 31 DECEMBER 2020: CREDIT	2,386	6,307,647	95,011	5,776,078	12,178,736	1,052,587	284,650	4,610,081	5,947,318	(1,543)	18,126,897
Non-distributable reserves	-	-	-	3,433,625	3,433,625	-	-	-	-	- 1	3,433,625
Council designated funds	2,386	5,358,340	54,685	2,146,360	7,559,385	1,052,587	284,650	-	1,337,237	-	8,899,008
Restricted funds	-	949,307	40,326	196,093	1,185,726	-	-	4,610,081	4,610,081	(1,543)	5,794,264
Net (decrease)/increase in funds	1,770	777,643	8,476	2,906,879	3,692,998	131,771	138,676	104,950	375,397	3,545	4,073,710
Surplus/(Deficit) for the year	224,976	939,946	(9,105)	(267,166)	663,675	(80,554)	502	7,238	(72,814)	99,038	914,875
				,							-
Other comprehensive income comprising:											
Remeasurements on defined benefit/contribution plans				201,046	201,046						201,046
Remeasurements on defined benefit medical plan				183,588	183,588						183,588
Remeasurements on defined benefit pension plan Remeasurements on defined benefit/contribution provident plan				52,632 (1,035)	52,632 (1,035)						52,632 (1,035)
Remeasurements on defined benefit/contribution provident plan Remeasurements on group life assurance plan				(1,035)	(34,139)						(34,139)
Fair value gains/(losses) on financial assets				2,957,789	2,957,789						2,957,789
Fair value gains/(iosses) on infancial assets				2,957,769	2,957,769						2,957,769
Net transfers (to)/from other funds	(223,206)	(162,303)	17,581	15,210	(129,512)	212,325	138,174	97,712	448,211	(95,493)	-
BALANCE AS AT 31 DECEMBER 2021: CREDIT	4,156	7,085,290	103,487	8,682,957	15,871,734	1,184,358	423,326	4,715,031	6,322,715	2,002	22,200,607
Non-distributable reserves	-	-	-	5,462,352	5,462,352	-	-	-	-	-	5,462,352
Council designated funds	4,156	5,951,071	63,120	3,027,374	9,041,565	1,184,358	423,326	-	1,607,684	-	10,653,405
Restricted funds		1,134,219	40,367	193,231	1,367,817	-	-	4,715,031	4,715,031	2,002	6,084,850
Net (decrease)/increase in funds	(2,971)	298,657	7,609	(1,261,794)	(955,528)	(146,919)	244,639	245,782	343,502	(777)	(615,774)
(Deficit)/Surplus for the year	(8,067)	598,801	(2,207)	203,977	800,571	(116,882)	44,463	17,240	(55,179)	119,875	857,200
Other comprehensive income comprising:											
Remeasurements on defined benefit/contribution plans				(186,253)	(186,253)						(186,253)
Remeasurements on defined benefit medical plan				(146,976)	(146,976)						(146,976)
Remeasurements on defined benefit pension plan				(48,737)	(48,737)						(48,737)
Remeasurements on defined benefit/contribution provident plan				(1,628)	(1,628)						(1,628)
Remeasurements on group life assurance plan				11,088	11,088						11,088
Fair value gains/(losses) on financial assets				(1,286,721)	(1,286,721)						(1,286,721)
Net transfers (to)/from other funds	5,096	(300,144)	9,816	7,203	(283,125)	(30,037)	200,176	228,542	398,681	(120,652)	-
BALANCE AS AT 31 DECEMBER 2022: CREDIT	1,185	7,383,947	111,096	7,421,163	14,916,206	1,037,439	667,965	4,960,813	6,666,217	1,225	21,584,833
Non-distributable reserves	-	-	-	3,391,595	3,391,595	-	-	-	-		3,391,595
Council designated funds Restricted funds	1,185	6,376,171 1,007,776	72,771 38,325	3,832,676 196,892	10,281,618 1,242,993	1,037,439	667,965	- 4,960,813	1,705,404 4,960,813	- 1,225	11,988,207 6,205,031

* This fund group includes the non-distributable fair value reserve.

UNIVERSITY OF PRETORIA AND ITS SUBSIDIARIES CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTES	2022	2021
		R'000	R'000
CASH FLOWS FROM OPERATING ACTIVITIES*			
Cash generated from operations	26	557,932	977,678
Interest received	18	222,375	149,417
Dividends received	18	219,295	192,818
Interest paid		(272)	(18)
Taxation refunded	23	103	205
		999,433	1,320,100
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of property, plant and equipment	1	(476,881)	(332,789)
Purchases of intangible assets	3	(1,396)	(6,713)
Purchases of investments	4	(4,667,783)	(3,383,435)
Proceeds from disposal of property, plant and equipment		7,925	373
Proceeds from disposal of investments	4	3,987,304	3,083,833
		(1,150,831)	(638,731)
CASH FLOWS FROM FINANCING ACTIVITIES			
Payment of lease liabilities		(1,583)	(2,010)
		(1,583)	(2,010)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		(152,981)	679,359
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF YEAR	9	3,152,918	2,473,559
CASH AND CASH EQUIVALENTS AT THE END OF YEAR	9	2,999,937	3,152,918

*Capital grants received are included in cash flows from operating activities. Management considers this disclosure to be a fairer indication of the nature of these transactions as it does not view the source of these grants as being a capital provider.

ACCOUNTING POLICIES FOR THE YEAR ENDED 31 DECEMBER 2022

1. Basis for preparation

The University prepared consolidated annual financial statements in accordance with International Financial Reporting Standards (IFRS) and the requirements of the Higher Education Act 101 of 1997 (as amended).

The consolidated financial statements have been prepared on a historical cost basis, except for certain financial assets and liabilities and post-employment benefits, which are measured at fair value.

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the University's accounting policies. The areas involving a higher degree of judgement or complexity, or the areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in accounting policy note 1.3.

The principal accounting policies adopted in the preparation of the consolidated financial statements are set out below and are consistent with those of the previous year, unless stated otherwise.

1.1. Going concern

The University's forecast and projections, taking account of reasonably possible changes in operating circumstances, show that the University should be able to operate for the foreseeable future with its current financing. Council has a reasonable expectation that the University has adequate resources to continue in operational existence for the foreseeable future. The University therefore continues to adopt the going concern basis in preparing its consolidated financial statements.

1.2. New standards, amendments and interpretations

1.2.1. New standards, amendments and interpretations adopted by the group

The group has applied the following amendments for the first time for their annual reporting period commencing 1 January 2022:

- Reference to the Conceptual Framework Amendments to IFRS 3
- Property, Plant and Equipment: Proceeds before Intended Use Amendments to IAS 16
- Onerous Contracts Costs of Fulfilling a Contract Amendments to IAS 37
- IFRS 1 First-time Adoption of International Financial Reporting Standards Subsidiary as a first-time adopter
- IFRS 9 Financial Instruments Fees in the '10 per cent' test for derecognition of financial liabilities
- IAS 41 Agriculture Taxation in fair value measurements

The amendments listed above did not have an impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

1.2.2. New standards, amendments and interpretations issued, not yet effective

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2022 reporting periods and have not been adopted early by the group. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

1.3. Significant accounting judgements and estimates

Some of the amounts included in the consolidated financial statements involve the use of judgement and/or estimation. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to prior experience, but actual results may differ from the amounts included in the consolidated financial statements. Information about such judgements and estimations is contained in the accounting policies and/or the notes to the consolidated financial statements, and the key areas are summarised below.

1.3.1. Judgements

Management has made the following judgements, apart from those involving estimations, which have significant effects on the amounts recognised in the financial statements.

(a) Impairment of financial assets

The loss allowances for financial assets are based on assumptions about risk of default and expected loss rates. The group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the group's past history and existing market conditions, as well as forward-looking estimates at the end of each reporting period.

The University tests whether trade receivables have suffered any impairment in accordance with accounting policy note 8. Assets that are individually significant are considered separately for impairment. When these assets are impaired, any impairment loss is recognised directly against the related asset. Assets that are individually significant and that are not impaired, and groups of smaller balances are considered for impairment on a portfolio basis, based on similar credit risk.

Impairment losses are recognised in an "allowance account for credit losses" until the impairment can be identified with an individual asset, and, at that point, the allowance is written off against the individual asset. Subsequent recoveries of amounts previously written off are credited in the statement of profit or loss. Refer to notes 6 and 8 of the consolidated financial statements for the carrying amounts of loans and receivables and the impairment losses provided for in 2022.

(b) Revenue from contracts with customers

IFRS 15 provides stipulates the accounting requirements that apply to all revenue arising from contracts with customers and requires the identification of the contract with the customer, identification of the separate performance obligations, determination of the transaction price, allocation of the transaction price, and the recognition and disclosure of revenue.

The classes of revenue that the group has determined to be within the scope of IFRS 15, includes research contracts and services rendered. These categories of income are primarily conducted on multi-year terms and are linked to performance objectives, milestones or obligations. When performance objectives are satisfied at a point in time, revenue is recognised when control transfers or the objective is met. This recognition requires

judgment regarding the deliverables noted in each contract, as well as the group's performance against them. When performance objectives are satisfied over time in line with expenditure, the expenditure incurred is used as a measure of revenue recognition.

(c) Provision for expected credit losses of trade receivables and student fee receivables

To measure the expected credit losses, management uses judgment to group together receivables based on shared credit risk characteristics and days past due. The expected loss rates are based on the historical payment profiles and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of the customers to settle the receivables.

(d) Deferred revenue

Grants and other non-commercial income received are limited to the expenses incurred and the balance is recognised as deferred income in the statement of financial position. Such income obtained to reimburse expenses incurred are analysed on an individual contract basis. The deferral of income necessitates a degree of judgement by management. For asset grant income, the expected useful life of the asset is used as a basis for determining the timing of revenue recognition, which requires estimation of the useful life of the underlying assets. Refer to note 13 of the consolidated financial statements for the carrying amount of deferred income. Judgement is also required in estimating the amounts classified as current and non-current.

(e) Leases

Assets and liabilities arising from a lease are initially measured on a present value basis. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the group, the expected incremental borrowing rate of the group is used to determine the discount rate.

1.3.2. Estimates

Key sources of estimation uncertainty at the reporting date, that have the most significant effect on the amounts recognised in the consolidated financial statements are:

(a) Useful lives of property, plant and equipment

The University estimates the useful lives of property, plant and equipment based on the period over which the assets are expected to be available for use. The estimated useful lives of property, plant and equipment are reviewed at each reporting date and are updated if expectations differ from previous estimates due to physical wear and tear, technical or commercial obsolescence, actual usage patterns or other limits on the use of the relevant assets. The amounts and timing of recorded expenses for any period would be affected by changes in these factors and circumstances. A reduction in the estimated useful lives of the property, plant and equipment would increase the recorded expenses and decrease the non-current assets. For details of carrying amounts as at the end of the reporting period, refer to note 1 of the consolidated financial statements.

(b) Fair value of investments

Where the fair value of investments cannot be measured based on quoted prices in an active market, their fair value is measured using various valuation techniques. The fair value of the group's unlisted equities is performed by the group's investment managers based on an earnings multiple methodology or a discounted

cash flow methodology. When possible, the inputs to these models are taken from observable markets however a degree of estimation is required in establishing the fair values. For details of carrying amounts as at the end of the reporting period, refer to note 4 of the consolidated financial statements.

(c) Post-employment benefits

Post-employment benefits have been recognised in accordance with accounting policy note 12. The cost of post-employment benefits is determined using actuarial valuations. The actuarial valuation involves making assumptions about discount rates, mortality rates and income at retirement. Due to the long-term nature of these plans, such estimates are subject to significant uncertainty. The main assumptions and carrying amounts related to post-employment benefits are summarised in note 10 of the consolidated financial statements.

(d) Inventories

Inventories are initially recorded at cost and subsequently measured at the lower of cost and net realisable value. Net realisable value is an estimate of the selling price in the ordinary course of business based on market trends, less all costs associated with the completion and the sale of the asset. For details of carrying amounts as at the end of the reporting period, refer to note 7 of the consolidated financial statements.

2. Reserve funds

2.1. Unrestricted operating fund

The unrestricted operating fund in the consolidated statement of changes in funds reflects the University's subsidised activities and also includes the tuition fees and expenditure in respect of the formal programmes of the Gordon Institute of Business Science (GIBS). These funds primarily represent the teaching component of the University. Additions to these funds mainly comprise subsidies, tuition fees and the sales and services of educational activities (including patient fees at the Onderstepoort Veterinary Academic Hospital) as well as transfers from other funds to finance expenditure.

Expenditure mainly comprises direct expenses, including salaries in academic departments for teaching and learning, research and community service, as well as other professional service expenses such as academic administration, library facilities, bursaries and loans. Institutional expenses, such as expenses incurred for student services, information technology and operating costs regarding land and buildings, are also recorded here.

2.2. Restricted funds

These funds may be used only for the purposes that have been specified in legally binding contracts by the provider of such funds or by another legally empowered person. The University Council has no discretion or control in this regard, but retains an oversight role with regard to ensuring that expenditure is in accordance with the mandate received from funders and University.

2.3. Council designated funds

These funds fall under the discretion of Council (e.g. sales of goods and services, non-prescriptive donations and grants, income from investments that are not restricted, specific purpose or administrated funds) and can be designated for specific purposes. Decisions in this regard can be changed at the discretion of Council.

2.4. Non-distributable reserves

These funds consist of the investment revaluation reserve. Gains/losses on the fair value adjustments of investments are recognised in a revaluation reserve until such time as the investment is disposed of or sold, when the gain/loss is transferred to Council designated funds.

3. Subsidiaries

Subsidiaries are all entities (including structured entities) over which the group has control. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are de-consolidated from the date that control ceases.

The group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair value at the acquisition date. The group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measurement are recognised in profit or loss.

Any contingent consideration to be transferred by the group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration is recognised in accordance with IFRS 9 in profit or loss.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired, is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognised and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in the statement of profit or loss.

Inter-company transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated. When necessary, amounts reported by subsidiaries have been adjusted to conform to the University's accounting policies.

4. Associated companies

Associates are all entities over which the group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The group's investment in associates includes goodwill identified on acquisition.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss, where appropriate.

The group's share of post-acquisition profit or loss is recognised in the statement of profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

The group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognises the amount in 'share of profit/(loss) of associates' in the statement of profit or loss.

Profits and losses resulting from upstream and downstream transactions between the group and its associate are recognised in the group's financial statements only to the extent of unrelated investor's interests in the associates. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred.

5. Foreign currency translation

The consolidated financial statements are presented in South African Rand, the functional and presentation currency of the group. Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of profit or loss.

6. Property, plant and equipment

Land and buildings consist mainly of lecture halls, laboratories, student residences and administrative buildings. All property, plant and equipment is stated at historical cost less accumulated depreciation (aggregated with accumulated impairment losses). Historical cost includes expenditure that is directly attributable to the acquisition of the items. Property, plant and equipment acquired by means of donations is recorded at fair value at the date of the donation.

6.1. Depreciation

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives:

Vehicles	5 years
Computer equipment	6 years
Furniture and equipment	10 years
Audio-visual equipment	15 years
Buildings	15 to 80 years
Laboratory equipment	20 years
Property under construction	Not depreciated until available for use

Assets with a cost less than R5,000 are depreciated in full in the year of acquisition.

Library books and journals are expensed in the financial period incurred.

The assets' useful lives and residual values are reviewed annually and adjusted, if appropriate, at the end of each reporting period. Depreciation is charged to the statement of profit or loss.

6.2. Maintenance, repairs and replacement costs

Routine repair and maintenance costs are charged to the statement of profit or loss during the financial period in which they are incurred. The costs of major maintenance or overhaul of an item of property, plant or equipment are recognised in the carrying amount of the item of property, plant and equipment only if it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably. Expenditure incurred to replace a component of an item is capitalised to the cost of the item. The remaining carrying amount of the replaced part is derecognised.

6.3. Impairment of assets

Assets are assessed during each financial year for any indication that an asset may be impaired. If any such indication exists, an estimate is made of the asset's recoverable amount. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

6.4. Gains and losses on disposal of PPE

Gains and losses on the disposal of property, plant and equipment are determined by comparing the proceeds to the carrying amount of the asset on the date of disposal and are recognised in the statement of profit or loss.

7. Intangible assets

7.1. Computer software development costs

Costs associated with maintaining computer software programmes are recognised as an expense as incurred. Development costs that are directly attributable to the design and testing of identifiable and unique software products controlled by the group are recognised as intangible assets when the following criteria are met:

- it is technically feasible to complete the software product so that it will be available for use;
- management intends to complete the software product and use or sell it;
- there is an ability to use or sell the software product;
- it can be demonstrated how the software product will generate probable future economic benefits;
- adequate technical, financial and other resources to complete the development and to use or sell the software product are available; and
- the expenditure attributable to the software product during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the software product include expenditure relating to the implementation partner, employee costs of staff employed and hardware and software purchased specifically for the Enterprise Resource Planning (ERP) System. Other development expenditures that do not meet these criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

Computer software development costs recognised as assets are amortised from the date on which the asset is available for use. Amortisation is calculated on a straight-line basis over its estimated useful life of 20 years (ERP systems) to their residual values and are carried at cost less accumulated amortisation. The estimated useful life is

reduced for software with shorter estimated lifespans and is generally amortised over 10 years. The useful life and residual value are reviewed annually. Intangible assets are not revalued.

7.2. Artwork

Artwork is recorded at cost or the estimated fair value at the date of the donation. The fair value is deemed to be a reasonable market value at the date of the donation. The market value at the date of the donation is determined by an art appraiser. Artwork is considered to have an indefinite useful life since there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows. Artwork is therefore not amortised.

Artwork is not revalued. Impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. There was no indication in the current year that artwork should be impaired.

7.3. Right of transfer and licence fees

Right of transfer and licence fees are shown at historical cost. Both these categories have a definite useful life and are carried at cost less accumulated amortisation. Right of transfer is amortised from the date on which the asset is available for use. Right of transfer is amortised over the period of employment and the licence fees are amortised over 20 years. Amortisation is calculated using the straight-line method to allocate cost of right of transfer and licences over the estimated useful lives to their residual values. The useful lives and residual values are reviewed annually.

7.4. Impairment of intangible assets

Intangible assets that have an indefinite useful life and intangible assets not ready for use are not subject to amortisation and are tested annually for impairment. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash generating units). Prior impairments of financial assets are reviewed for possible reversal at each reporting date.

8. Financial instruments

8.1. Classification of financial assets

The group classifies its financial assets in the following categories: financial assets at fair value through other comprehensive income (FVOCI), financial assets at fair value through profit and loss (FVPL) and financial assets at amortised cost. The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows. Management determines the classification of its financial assets at initial recognition.

8.1.1. Amortised cost

This category applies only when the contractual terms of the instrument give rise, on specified dates, to cash flows that are solely payments of principal and interest on principal, and where the instrument is held under a business model where the objective is met by holding the instrument to collect contractual cash flows.

8.1.2. FVOCI

Financial assets at fair value through other comprehensive income are instruments that are held within a business model where the objective is achieved by both collecting contractual cash flows and selling of financial assets. For investments in equity instruments this will depend on whether the group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

8.1.3. FVPL

Financial assets at fair value through profit or loss applies to all investments that do not qualify as at amortised cost or fair value through other comprehensive income.

8.2. Recognition and measurement of financial assets

Regular purchases and sales of financial assets are recognised on the trade date – the date on which the group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss.

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the group has transferred substantially all risks and rewards of ownership.

8.2.1. Debt Instruments

Subsequent measurement of debt instruments depends on the group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the group classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows, where those cash flows
 represent solely payments of principal and interest, are measured at amortised cost. Interest income from
 these financial assets is included in finance income using the effective interest rate method. Any gain or
 loss arising on derecognition is recognised directly in profit or loss. Impairment losses are presented as
 separate line item in the statement of profit or loss.
- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses, which are recognised in profit or loss.
- FVPL: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net with other gains/(losses) in the period in which it arises.

8.2.2. Equity Instruments

The group subsequently measures all equity investments at fair value. Where the group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as part of 'Interest and dividends' when the group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in the statement of profit or loss, as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

8.2.3. Loans and Receivables

Loans and receivables are recognised initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognised at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method, less allowances for loss.

8.3. Impairment of financial assets

The group has the following types of financial assets that are subject to the expected credit loss model:

- Student loans
- Student receivables
- Trade receivables
- Debt investments carried at amortised cost

The group assesses, on a forward-looking basis, the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For student loans, student receivables and trade receivables, the group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables. The expected loss rates are based on the payment profiles over a period of 36 months before 31 December and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of debtors to settle the receivables. Outstanding debt is written off when debt is prescribed or in cases where a debtor is not traceable or where it is not economically feasible to collect the debt.

The provision for student loans is made on the following basis:

Student loans older than 3 years	100%
UP assist loans	100%

The provision for student receivables is made on the following basis:

Student fees for the current year	0%
Student fees older than 1 year	Average loss rate of the preceding 3 years
Student fees older than 2 years	100%

8.4. Financial liabilities

Financial liabilities are carried at amortised cost as the group does not carry any financial liabilities at fair value through profit or loss. Financial liabilities comprise accounts payable, student deposits and accrued liabilities. Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less; if not, they are presented as non-current liabilities.

Financial liabilities are derecognised when the obligation under the liability is discharged, cancelled or expired. Financial liabilities and assets are offset, and the net amount reported in the statement of financial position only when there is a legally enforceable right to set off the recognised amounts and there is an intention either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

9. Inventories

Inventories are initially recorded at cost and subsequently measured at the lower of cost and net realisable value. Any write down to net realisable value is recognised in profit or loss. Cost is determined on the weighted averagecost basis. When a perpetual inventory system is not present, it is determined at the most recent purchase price. Net realisable value is an estimate of the selling price in the ordinary course of business less applicable variable selling expenses.

10. Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and that are subject to an insignificant risk of changes in value, and bank overdrafts. In the statement of financial position, bank overdrafts are included in borrowings under current liabilities.

11. Current and deferred income tax

The University is exempt from income tax in terms of section 10(1)(cA)(i) of the Income Tax Act. However, some of the subsidiaries are not exempt from Income Tax.

The tax expense for the period comprises current and deferred tax. Tax is recognised in the statement of profit or loss, except to the extent that it relates to items recognised directly in equity. In this case, the tax is also recognised in equity.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at year end in South-Africa, where the University's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulations is subject to interpretation and establishes provisions, where appropriate, on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither the accounting, nor the taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by year end and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

12. Post-employment benefits

12.1. Defined benefit pension and defined contribution provident plans

A defined contribution plan is a pension plan under which the employer pays fixed contributions into a separate entity. The entity has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. A defined benefit plan is a pension plan that is not a defined contribution plan.

The University contributes towards two pension schemes namely the Associated Institution Pension Fund (AIPF) and the UP Pension Fund as well as two provident funds, namely, the UP Provident Fund and the FundsAtWork (FAW) Umbrella Provident Fund.

The AIPF is registered and managed in terms of the Pension Funds Act 24 of 1956 for Associated Institutions. The UP Pension Fund and the UP Provident Fund are managed by Boards of Trustees and are registered in terms of the provisions of the Pension Fund Act. The schemes are funded through payments to trustee-administered funds, determined by periodic actuarial calculations.

The UP Provident Fund is a defined contribution plan in terms of members' retirement benefits. However, the disability and death benefits stipulated in the rules of the Provident Fund, represent a "defined benefit" component. As a result of the defined benefit component, the UP Provident Fund is classified as a defined benefit plan.

The FAW Umbrella Fund provides employees an alternative benefit structure (retirement funding and risk benefits) to select on a voluntary basis. The FAW Umbrella Fund is a defined contribution fund. The Fund is managed by a Board of Trustees appointed by Momentum. Momentum is a member of Momentum Metropolitan Holdings Limited. The University has appointed an oversight committee that monitors performance and risk.

The asset/liability recognised in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligation. Where there is no efficient market in such bonds, the market rates on government bonds are used. The current service cost of the defined benefit plan, recognised in the statement of profit or loss in "personnel costs", reflects the increase in the defined benefit obligation resulting from employee service in the current year.

The net interest income is calculated by applying the discount rate to the net balance of the defined benefit obligation and the fair value of the plan assets. The income is included in 'net interest income on defined benefit plans' in the statement of profit or loss.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Past-service costs are recognised immediately in the statement of profit or loss.

For defined contribution plans, the University pays contributions to an administrator on a contractual basis. The University has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expenses when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

12.2. Defined benefit medical plan

In accordance with the existing personnel practice, the Council has undertaken to make medical fund contributions on behalf of certain qualifying retired staff members and certain qualifying future retirees.

The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. This obligation is valued annually by independent qualified actuaries.

12.3. Group life assurance plan

The University provides an insured group life benefit to all employees. This benefit is payable on the death of the employee. The group life assurance scheme is an unfunded arrangement, the payment of the annual scheme subsidies are funded from revenue generated in the Council Controlled Unrestricted Operating Fund.

The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. This obligation is valued by an independent qualified actuary.

13. Short term employee benefits

Liabilities for salaries and wages, including non-monetary benefits, annual leave and accumulating sick leave that are expected to be settled fully within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the statement of financial position.

14. Agency funds

These are funds administered on behalf of beneficiaries of deceased employees and other third parties. These funds are recognised at the fair value thereof and subsequently carried at amortised cost. The funds are held in investments or cash and cash equivalents until payments are requested by the beneficiaries of these funds.

15. Leave accrual

An accrual is raised on the estimated liability for annual leave as a result of services rendered by employees up to the reporting date. The accrual is based on the accumulated leave that is carried over to future periods and the actual employee cost.

16. Leases

16.1. Group as lessee

At inception of a contract, the group assesses whether a contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The group recognises a right of use asset and a lease liability at the date at which the leased asset is available for use by the group.

The right-of-use assets are initially measured at cost, which comprises:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives; and
- any initial direct cost incurred.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date. These include:

- fixed payments, less any lease incentive receivables;
- variable lease payments that depend on a rate, initially measured using the rate as at the commencement date;
- the exercise price of a purchase option, if the group is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the group is reasonably certain to exercise the option.

Lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

The group has elected not to recognise right of use assets and lease liabilities for short terms leases and leases of low value assets. Short terms leases are classified as leases where the term is 12 months or less. Low value assets are classified as lease assets with a value of R75 000 or less. For these leases, the group recognises the lease payments as an expense on a straight-line basis over the lease term.

16.2. Group as lessor

Lease income from operating leases where the group is a lessor is recognised in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature.

17. Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable, and represents amounts receivable for goods or services, stated net of value-added tax, returns, rebates and discounts.

The group recognises revenue when the amount of revenue can be reliably measured, when it is probable that future economic benefits will flow to the group and when specific criteria have been met for each of the group's activities, as described below.

17.1. Subsidies and grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the University will comply with all required conditions. Government grants are recognised in profit or loss on a systematic basis over the periods in which the entity recognises the expenses for which the grants are intended to compensate as per the Government Grants Standard (IAS 20). The balance is recognised as deferred income in the statement of financial position.

Block grants relate to the subsidy received from Government for operation activities of the University (Councilcontrolled unrestricted operational funds).

All other income grants, including earmarked grants, relate to specifically funded programmes in teaching and research activities (Restricted and designated, specifically funded activities).

Grants relating to property, plant and equipment are included in non-current liabilities as deferred income and are recognised in the statement of profit or loss on a straight-line basis over the expected lives of the related assets. The portion of the grants that will be released to the statement of profit or loss during the next 12 months is included in current liabilities.

17.2. Income from contracts and services

Income from contracts is recognised as income at the fair value of the consideration received or receivable in the period to which it relates. Any such income is recognised as income in the financial period when the University is entitled to those funds. Income is deferred in the following circumstances:

- Prescriptive contract income is recognised when the specified condition or occurrence has been met (at a point in time); and
- Non-prescriptive contract income is recognised to the extent that expenses are incurred where the stage of completion cannot be estimated reliably.

Income derived from rendering of services is recognised in the accounting period in which the service is rendered, at a point in time or over a period of time depending on the contract. Income is recorded as revenue when received over the period of a contract and performance obligations are fulfilled. Where income has been received and the related performance obligations have not yet been fulfilled, a contract liability is recorded. Performance obligations are typically satisfied as services are rendered.

Classes of income from contracts are measured against the criteria in IFRS 15. If the criteria are not met in terms of IFRS 15, the accounting principles of the Conceptual Framework are applied to recognise revenue.

Income from contracts and services relate to specifically funded activities with third parties.

17.3. Tuition fees and other fee income

The consideration for tuition and residence fees are recognised in the period that the services are rendered, generally in the current financial year. If the services rendered exceed the payments, a contract asset is recognised. If the payment exceeds the services rendered, a contract liability is recognised. Bursaries, scholarships and other financial aid provided by the University to students for tuition fees are recognised as a reduction of fees in accordance with IFRS 15.

Deposits provided by prospective students are treated as current liabilities until the amount is billed as being due to the University.

17.4. Donations and gifts

Donations (including donations in kind) and gifts are recognised on receipt at fair value, at a point in time, in accordance with the Conceptual Framework.

18. Interest and dividend income

Interest income is recognised in the statement of profit or loss on a time-proportion basis using the effective interest rate method.

Dividend income is recognised in the statement of profit or loss when the right to receive payment is established.

19. Research costs

Research costs are written off in the year in which they arise, since these types of costs are inherent in the normal operations of a university. Research costs are not recorded separately.

20. Rounding of amounts

All amounts disclosed in the consolidated financial statements and notes have been rounded off to the nearest thousand rand unless indicated otherwise.

1. Property, plant and equipment

	Land and buildings	Laboratory equipment	Computer equipment	Furniture and equipment	Vehicles	Audio- visual equipment	Total
	R'000	R'000	R'000	R'000	R'000	R'000	R'000
Year ended 31 December 2021							
Opening net carrying amount	5,339,800	458,539	250,531	68,842	54,259	53,593	6,225,564
Additions	150,993	94,127	69,754	7,872	1,003	9,040	332,789
Disposals	-	(830)	(1,455)	(629)	-	(73)	(2,987)
Depreciation charge	(109,026)	(33,421)	(65,145)	(11,472)	(5,602)	(5,833)	(230,499)
Closing net carrying amount	5,381,767	518,415	253,685	64,613	49,660	56,727	6,324,867
At 31 December 2021							
Cost	6,446,751	1,019,225	759,757	171,177	109,783	102,646	8,609,339
Accumulated depreciation	(1,064,984)		(506,072)	, , ,	(60,123)	(45,919)	(2,284,472)
Net carrying amount	5,381,767	518,415	253,685	64,613	49,660	56,727	6,324,867
Year ended 31 December 2022							
Opening net carrying amount	5,381,767	518,415	253,685	64,613	49,660	56,727	6,324,867
Additions	327,362	55,503	67,358	11,204	8,204	7,250	476,881
Disposals	(16)	(2,720)	(1,512)	(689)	(1,843)	(578)	(7,358)
Depreciation charge	(115,405)	(39,917)	(60,276)	(10,835)	(3,398)	(5,968)	(235,799)
Closing net carrying amount	5,593,708	531,281	259,255	64,293	52,623	57,431	6,558,591
At 31 December 2022							
Cost	6,772,871	1,035,760	762,715	168,369	110,456	103,739	8,953,910
Accumulated depreciation	(1,179,163)	, , ,	(503,460)	(104,076)	(57,833)	(46,308)	(2,395,319)
Net carrying amount	5,593,708	531,281	259,255	64,293	52,623	57,431	6,558,591

Capital expenditure expensed R29.9m (2021: R27.4m) is reflected under "depreciation and amortisation' on the statement of profit and loss. Such expenses relate to capital items with a value under R5 000 (refer note 6 of the accounting policies).

A complete schedule of land and buildings is available for inspection at the offices of the University.

Buildings to the amount of R336.7m (2021: R306.1m) included above, are erected on land belonging to the Gauteng Provincial Administration.

Included in land and buildings is expenditure of R140.9m (2021: R93.4m) which relates to property that is still under construction. This will be depreciated once available for use.

2. Right-of-use assets

	Office equipment	Total
Year ended 31 December 2021	R'000	R'000
Opening net carrying amount	2,737	2,737
Additions	565	565
Depreciation charge	(1,829)	(1,829)
At 31 December 2021	1,473	1,473
Year ended 31 December 2022		
Opening net carrying amount	1,473	1,473
Additions	1,180	1,180
Depreciation charge	(1,550)	(1,550)
At 31 December 2022	1,103	1,103

The group rents office equipment and has the right of use and to obtain all of the economic benefits from using the office equipment. The lease agreements are for a period of two to three years. Lease liabilities have been included on the statement of financial position. Refer to note 11.

3. Intangible assets

	Computer	Right of transfer and	Artwork	Total
	software	licence fee	<i>f</i> attront	. otal
	R'000	R'000	R'000	R'000
Year ended 31 December 2021				
Opening net carrying amount	51,343	4,885	17,786	74,014
Additions	5,864	492	357	6,713
Amortisation charge	(7,829)	(470)	-	(8,299)
Closing net carrying amount at end of the year	49,378	4,907	18,143	72,428
At 31 December 2021				
Cost	323,003	18,748	22,384	364,135
Accumulated amortisation	(273,625)			(287,466)
Accumulated impairment	()	- (10,011)	(4,241)	(4,241)
Net carrying amount	49,378	4,907	18,143	72,428
Year ended 31 December 2022				
Opening net carrying amount	49,378	4,907	18,143	72,428
Additions	614	284	498	1,396
Disposals/write-offs	(3)	-	-	(3)
Amortisation charge	(7,363)	(367)	-	(7,730)
Closing net carrying amount at end of the year	42,626	4,824	18,641	66,091
At 31 December 2022				
Cost	323.614	19,032	22,882	365,528
Accumulated amortisation	(280,988)	(14,208)	22,002	(295,196)
Accumulated amonsation	(200,000)	(14,200)	(4,241)	(233,130) (4,241)
Net carrying amount	42,626	4,824	18,641	<u>(4,241)</u> 66,091

Intangible assets consist only of purchased intangible assets. There are no internally generated intangible assets. Amortisation of intangible assets is included in depreciation and amortisation in the statement of profit or loss.

4. Investments

4.1 Investments at fair value through other comprehensive income

	2022 R'000	2021 R'000
Non-current assets	R 000	K 000
Local equity	4,597,880	4,447,921
Unlisted equity	564,795	376,621
Foreign equity	8,633,591	9,552,787
	13,796,266	14,377,329

Investments at fair value through other comprehensive income include equity securities which the group has irrevocably elected at initial recognition to recognise in this category in accordance with IFRS 9. These are strategic investments and the group considers this classification to be more relevant.

A complete schedule of investments is available for inspection at the offices of the University.

Refer to note 20 for amounts recognised in profit or loss and other comprehensive income.

Movement in investments at fair value through other comprehensive income R'000 R'000 Beginning of year 14,377,329 11,117,287 Disposals of investments (3,904,527) (2,821,866) Acquisitions of investments 4,610,185 3,084,547 Movement in investment previously designated for GLA liability - 39,572 Net fair value (losses)/gains (1,286,721) 2,957,789 End of year 13,796,266 14,377,329 Financial assets at fair value include the following: 2022 2021 R'000 R'000 R'000 Listed securities - Rand 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - US Dollar 236,138 290,149 Unlisted securities 236,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 EURO 236,138 290,149 33,765,266 14,377,329 Rand		2022	2021
Disposals of investments (3,904,527) (2,821,866) Acquisitions of investments 4,610,185 3,084,547 Movement in investment previously designated for GLA liability - 39,572 Net fair value (losses)/gains (1,286,721) 2,957,789 End of year 13,796,266 14,377,329 Financial assets at fair value include the following: 2022 2021 R'000 R'000 R'000 R'000 Listed securities: 4,597,880 4,447,921 8,397,453 9,262,638 Equity securities - Rand 4,597,880 4,447,921 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 9,262,638 EURO 236,138 290,149 236,138 290,149 236,138 290,149	Movement in investments at fair value through other comprehensive income	R'000	R'000
Acquisitions of investments 4,610,185 3,084,547 Movement in investment previously designated for GLA liability - 39,572 Net fair value (losses)/gains (1,286,721) 2,957,789 End of year 13,796,266 14,377,329 Financial assets at fair value include the following: 2022 2021 R'000 R'000 R'000 R'000 Listed securities: 4,597,880 4,447,921 Equity securities - Rand 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 2022 2021 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 US Dollar 8,397,453 9,262,638 290,149	Beginning of year	14,377,329	11,117,287
Movement in investment previously designated for GLA liability - 39,572 Net fair value (losses)/gains (1,286,721) 2,957,789 End of year 13,796,266 14,377,329 Financial assets at fair value include the following: 2022 2021 R'000 R'000 R'000 Listed securities: 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 2022 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 EURO 2021 R'000 R'000 R'000	Disposals of investments	(3,904,527)	(2,821,866)
Net fair value (losses)/gains (1,286,721) 2,957,789 End of year 13,796,266 14,377,329 Financial assets at fair value include the following: 2022 2021 R'000 R'000 R'000 R'000 Listed securities: 4,597,880 4,447,921 236,138 290,149 Equity securities - Rand 8,397,453 9,262,638 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 US Dollar 8,397,453 9,262,638 2021 EURO 2022 2021 R'000	Acquisitions of investments	4,610,185	3,084,547
End of year 13,796,266 14,377,329 Financial assets at fair value include the following: 2022 2021 R'000 R'000 R'000 Listed securities: Equity securities - Rand 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 2022 2021 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 EURO 236,138 290,149 2021 8,397,453 9,262,638	Movement in investment previously designated for GLA liability	-	39,572
Financial assets at fair value include the following: 2022 R'000 2021 R'000 Listed securities: Equity securities - Rand 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 US Dollar 8,397,453 9,262,638 2021 Rand 5,162,675 4,824,542 8,397,453 9,262,638 US Dollar 8,397,453 9,262,638 290,149	Net fair value (losses)/gains	(1,286,721)	2,957,789
R'000 R'000 Listed securities: 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 8,397,453 9,262,638 US Dollar 8,397,453 9,262,638 290,149 EURO 236,138 290,149 2021	End of year	13,796,266	14,377,329
Listed securities: 4,597,880 4,447,921 Equity securities - Rand 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 2022 2021	Financial assets at fair value include the following:	2022	2021
Equity securities - Rand 4,597,880 4,447,921 Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 236,138 290,149		R'000	R'000
Equity securities - US Dollar 8,397,453 9,262,638 Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Prinancial assets at fair value are denominated in the following currencies: Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 2022 2021	Listed securities:		
Equity securities - EURO 236,138 290,149 Unlisted securities 564,795 376,621 13,796,266 14,377,329 Prinancial assets at fair value are denominated in the following currencies: Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 236,138 290,149	Equity securities - Rand	4,597,880	4,447,921
Unlisted securities 564,795 376,621 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 236,138 290,149	Equity securities - US Dollar	8,397,453	9,262,638
13,796,266 14,377,329 13,796,266 14,377,329 Financial assets at fair value are denominated in the following currencies: R'000 Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 236,138 290,149	Equity securities - EURO	236,138	290,149
2022 2021 Financial assets at fair value are denominated in the following currencies: R'000 R'000 Rand 5,162,675 4,824,542 US Dollar 8,397,453 9,262,638 EURO 236,138 290,149	Unlisted securities	564,795	376,621
Financial assets at fair value are denominated in the following currencies:R'000R'000Rand5,162,6754,824,542US Dollar8,397,4539,262,638EURO236,138290,149		13,796,266	14,377,329
Rand5,162,6754,824,542US Dollar8,397,4539,262,638EURO236,138290,149		2022	2021
US Dollar 8,397,453 9,262,638 EURO 236,138 290,149	Financial assets at fair value are denominated in the following currencies:	R'000	R'000
EURO 236,138 290,149	Rand	5,162,675	4,824,542
	US Dollar	8,397,453	9,262,638
13,796,266 14,377,329	EURO	236,138	290,149
		13,796,266	14,377,329

Recognised fair value measurements

The following table explains the judgements and estimates made in determining the fair values of the financial assets that are recognised and measured at fair value. To provide an indication on the reliability of the inputs used in determining fair value, the group has classified its financial instruments into the three levels prescribed by IFRS 13 (Fair Value Measurements). An explanation of each level follows underneath the table.

	Level 1	Level 2	Level 3	Total 2022	Total 2021
Financial Assets	R'000	R'000	R'000	R'000	R'000
Listed equity:	4,587,947	-	-	4,587,947	4,438,866
Basic materials	1,039,609	-	-	1,039,609	1,102,951
Consumer goods	508,425	-	-	508,425	414,322
Consumer services	537,130	-	-	537,130	492,800
Derivatives	-	-	-	-	1
Financials	902,469	-	-	902,469	795,301
Health care	61,004	-	-	61,004	115,394
Industrials	187,180	-	-	187,180	163,263
Renewable Energy	28,245	-	-	28,245	22,377
Telecommunications	159,270	-	-	159,270	180,257
Real estate	455,212	-	-	455,212	468,846
Technology	457,123	-	-	457,123	435,974
Other		-	-	-	-
Unit trusts	252,280	-	-	252,280	247,380
Local listed commodities	9,933	-	-	9,933	9,055
Gold	6,996	-	-	6,996	8,291
Other metals	2,937	-	-	2,937	764
Unlisted equity	-	51,824	512,972	564,796	376,621
Oil and gas/energy		-	252,864	252,864	177,883
Private equity		51,824	259,506	311,330	198,136
Other		-	602	602	602
Foreign securities	8,633,590	-	-	8,633,590	9,552,787
Unit trusts	5,672,403	-	-	5,672,403	2,010,315
Specialised securities	2,961,187	-	-	2,961,187	7,542,472
	13,231,470	51,824	512,972	13,796,266	14,377,329

The fair value of listed shares and commodities is determined with reference to quoted market prices. Unlisted securities are recognised at fair value based on the market value obtained from fund managers.

For an analysis of the sensitivity of the assets to price risk refer to note 31.1.A.(ii).

Level 1: The fair value of financial instruments traded in active markets is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the group is the current bid price.

Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Valuation techniques used to determine fair values of unlisted equity

The fair value of unlisted equities is based on an earnings multiple methodology or a discounted cash flow methodology.

Earnings multiple method

Methodology

This valuation method determines the value of the investment through the use of an appropriate and reasonable valuation multiple applied to the maintainable earnings of the investment. Maintainable earnings are typically based on historical earnings figures that are considered to be appropriate and relevant. Maintainable earnings would be adjusted for current information, given the need to maintain an optimal correlation between the period of the benchmark multiple and the period of the maintainable earnings.

An 'Earnings before tax and interest and depreciation and amortisation' (EBITDA), an 'Earnings before interest after tax' (EBIAT) or a price/earnings (P/E) multiple is derived for each investment with reference to the multiples of comparable publicly traded entities. The benchmark multiple is further adjusted for areas of difference relating to the growth prospects and risk profile. This would typically include geographic, operational, financial, and liquidity risk factors.

Inputs	
Maintainable earnings:	Historical actual earnings figures
Earnings multiple:	Between 1-7 benchmark entities per individual investment

Discounted cash flow method

Methodology

Cash flows are based on the projected future distributions due to investors in the underlying investments. The Fund Managers consider all available information for each investment, *inter alia*, information made available to shareholders, information presented during board meetings and other publicly available information. Cash flows are computed in and extracted from financial models adjusted for macroeconomic and applicable cash flow assumptions. Where possible the relevant cash flow forecasts are adjusted to reflect historical data, market convention or the impact of operational issues. Where these factors are not quantifiable or determinable through cash flow adjustments, the base discount rate is adjusted to reflect any additional risk or value enhancements.

A discount rate is determined for each investment and referenced to market comparable transactions where appropriate and available. The discount rate is usually based on a combination of a capital asset pricing model and a comparable market approach where an active market exists. The comparable market approach is based on the Internal Rate of Return (IRR) for recent and similar transactions observed by the Fund Manager, in addition to other market research.

Inputs

Cash flows from investments:	Ordinary and preference share dividends and redemptions and/or shareholder loan repayments
Discount rate:	Ranging from 12.7% and 20.0%
Risk free rate:	Ranging from 10.8% to 11.6%
CPI rate (long term):	4.75%

Where investments are valued on the earning multiple methodology with reference to the multiples of publicly traded companies, these investments are classified as level 2 in the fair value hierarchy. All other unlisted investments are classified as level 3 in the fair value hierarchy.

Movement in level 3 investments at fair value through other comprehensive income	2022 R'000	2021 R'000
Beginning of year	324,061	238,602
Disposals of investments	(93,142)	(80,421)
Acquisitions of investments	223,343	123,372
Net fair value (losses)/gains	58,710	42,508
End of year	512,972	324,061

4.2	Investments at fair value through profit or loss	2022 R'000	2021 R'000
	Non-current assets		
	Listed bonds	1,192,040	1,120,024
	Fixed deposit	477	456
		1,192,517	1,120,480
	Current assets		
	Unit trusts and collective investments	209,896	236,069
		209,896	236,069
		1,402,413	1,356,549

Investments at fair value through profit or loss include debt investments managed on a portfolio basis that do not qualify for measurement at either amortised cost or fair value through other comprehensive income and equity investments that were not elected to recognise fair value gains and losses through other comprehensive income.

Refer to note 20 for amounts recognised in profit or loss and other comprehensive income.

Movement in investments at fair value through profit and loss	2022 R'000	2021 R'000
Beginning of year	1,356,549	1,226,463
Disposals of investments	(80,176)	(261,967)
Acquisitions of investments	57,598	298,811
Net fair value gains	68,442	93,242
End of year	1,402,413	1,356,549

Recognised fair value measurements

The following table explains the judgements and estimates made in determining the fair values of the financial assets that are recognised and measured at fair value. To provide an indication on the reliability of the inputs used in determining fair value, the group has classified its financial instruments into the three levels prescribed by IFRS 13 (Fair Value Measurements). An explanation of each level follows underneath the table.

Financial Assets	Level 1 R'000	Level 2 R'000	Level 3 R'000	Total 2022 R'000	Total 2021 R'000
Equity and unit trusts	169,065	-	-	169,065	199,419
Local cash	18,942	-	-	18,942	19,884
Foreign cash	953	-	-	953	193
Local equity	378	-	-	378	616
Local real estate	737	-	-	737	1,073
Foreign real estate	50	-	-	50	100
Local collective investments	147,993	-	-	147,993	177,448
Local unit trusts	-	-	-	-	-
Foreign unit trusts	12	-	-	12	105
Bonds	41,308	1,192,040	-	1,233,348	1,157,130
Local bonds	40,293	445,051	-	485,344	454,327
Foreign bonds	1,015	-	-	1,015	774
SA credit bonds		746,989	-	746,989	702,029
Total	210,373	1,192,040	-	1,402,413	1,356,549

The fair value of listed shares and commodities is determined with reference to quoted market prices. For an analysis of the sensitivity of the assets to price and credit risks refer to note 31.

Level 1: The fair value of financial instruments traded in active markets is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the group is the current bid price.

Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities.

Valuation techniques used to determine fair values of unlisted bonds

Methodology

The fair value of unlisted bonds are determined based on a yield curve or reference government bond and the current spread. Where cash flow discounting is required, similar yield curves are utilised. Yield curves are determined by fund managers and regular checks are done to compare to the curves supplied by the JSE, Bloomberg and NSX.

Fund managers conduct an analysis of the overall market spreads, including assessing recent new bond issues, changes to listed credit spreads and other relevant market information. The credit spread reflects the difference in yield between a treasury and corporate bond of the same maturity and is used to determine the riskiness of the bond. A wider credit spread could indicate a higher risk of default, while a narrower credit spread could indicate a lower risk of default.

The fund manager will only change the underlying spreads of an instrument under the following circumstances:

- If there is a market trade in any of the unlisted debt instruments

- If there are changes to the credit quality of an issuer.

- If there are change in the general level of spreads in the market.

Inputs

Yield curves	Based on the type of instrument and cash flow profile with reference to market yields
Market spreads	Observed market trades, per instrument type

4.3	Investments at amortised cost	2022 R'000	2021 R'000
	Current assets Call investment account		2,600
			2,600
	Investments at amortised cost include debt investments where the objective is to collect the contractual cash flows and that are solely payments of principal and interest.		
	Where applicable the year-end balances of other financial assets that are subsequently measured at amortised cost approximates their fair value at year-end.		
		2022	2021
	Movement in investments at amortised cost	R'000	R'000
	Beginning of year	2,600	2,523
	Disposals of investments	(2,600)	-
	Acquisitions of investments	-	77
	End of year	-	2,600

Deferred Tax	2022 R'000	2021 R'000
The movement in the deferred tax asset and liability is as follows:		
Balance at the beginning of the year	198	198
Movement during the year:		
Temporary differences on property, plant and equipment	(2)	-
Temporary differences on provisions	(147)	-
	49	198
The deferred tax balance consists of the following:		
Temporary differences on property, plant and equipment	(14)	(12)
Temporary differences on provisions	63	210
	49	198

A deferred tax asset is recognised for tax losses only to the extent that recovery is probable.

. Loans and receivables	2022 R'000	2021 R'000
Financial assets		
Student loans	132,049	136,213
Provision for credit losses	(123,408)	(124,252)
Purco SA	520	520
Other	15	15
	9,176	12,496

The current University policy is that all student loans are due within five years from completion of studies or deregistration. The weighted average interest rate applied for student loans was 5.22% (2021: 5.11%).

The fair value of student loans amounts to R6.5m (2021: R9.7m) at year end, discounted at the prime rate of 10.5% over 5 years. The fair value is determined based on internal data on possible cash flows and is therefore considered as level 3 on the fair value hierarchy.

Credit risk of student loans

6.

To measure the expected credit losses, student loans have been grouped together based on shared credit risk characteristics and days past due.

The expected loss rates are based on the historical payment profiles of loans and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of the students to settle the loans.

On that basis, the credit loss allowance as at 31 December 2022 was determined as indicated below for student loans.

As at 31 December 2022, a provision for credit losses of R123.4m (2021: R124.2m) was raised. The provision relates mainly to UP NSFAS loans that have a history of poor recovery as well as students who are experiencing financial difficulties. The overall provision has decreased due to the phasing out of NSFAS loans, however the percentage provided for current and previous year students has increased due to an increase in the proportion of University provided loans which are fully provided for.

Expected credit loss rate: 2022	Estimated gross carrying amount at default	Expected credit loss	Percentage expected credit loss
	R'000	R'000	%
Students enrolled for current year	24,546	20,496	84%
Student receivables - enrolled for previous years (1 to 2 years past due)	20,148	15,557	77%
Student receivables - enrolled for previous years (> 2 years past due)	6,798	6,798	100%
UP NSFAS loans	80,557	80,557	100%
	132,049	123,408	

7.

Expected credit loss rate: 2021	Estimated gross carrying amount at default	Expected credit loss	Percentage expected credit loss
	R'000	R'000	%
Students enrolled for current year	28,242	21,968	78%
Student receivables - enrolled for previous years (1 to 2 years past due)	16,138	10,451	65%
Student receivables - enrolled for previous years (> 2 years past due)	9,666	9,666	100%
UP NSFAS loans	82,167	82,167	100%
	136,213	124,252	
		2022	2021
Movements in the provision for credit losses are as follows:		R'000	R'000
Beginning of year		124,252	113,465
Provision for credit losses		4,978	11,522
Receivables written off during the year		(5,822)	(735)
End of year	-	123,408	124,252
All outstanding student loans are secured by two guarantees, with each guarantor earning per month.	ng more than R5,000		
Inventories		2022 R'000	2021 R'000
Laboratory and medical		2,049	4,270
Stationery		5,633	7,424
Technical		12,388	12,565
Study materials		430	471
Food		1,008	999
Other		4,334	4,477

25,842

30,206

The costs of individual items of inventory are determined using weighted average costs.

The cost of inventories recognised as an expense and included in 'other operating expenses' amounted to R107.2m (2021: R80.6m). Inventory carried at net realisable value is R nil (2021: R nil).

8. Receivables and prepayments	2022	2021
	R'000	R'000
Financial assets		
Student receivables	538,455	517,903
Student receivables - NSFAS	3,114	5,018
Provision for credit losses	(271,048)	(254,860)
	270,521	268,061
Research receivables	94,102	92,527
Trade receivables	271,212	234,700
Provision for credit losses	(46,276)	(37,834)
	319,038	289,393
Other financial assets		
Prepayments	43,917	25,052
SARS	116	-
Payroll debtors	1,626	1,326
Other	1,632	683
	47,291	27,061
	636,850	584,515

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value.

Credit risk of student receivables

To measure the expected credit losses, student receivables have been grouped together based on shared credit risk characteristics and days past due.

The expected loss rates are based on the historical payment profiles of tuition fees and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of the customers to settle the receivables. The expected loss rates are based on the underlying characteristics of each group of receivables taking into account payment trends, economic factors and political conditions.

The current year is generally not provided for, due to the large amount of the outstanding debt that is collected during the subsequent registration period. The preceding year's provision is based on the average debt and collections over the preceding three years. Debt older than two prior years is provided for in full.

As at 31 December 2022, a 100% expected loss rate was applied to student receivables enrolled for previous years and older than two years. These receivables are long outstanding and have been fully provided for. A 77.3% loss rate was applied to student receivables enrolled for previous years and between one and two years past due. No expected loss rate was applied to student receivables enrolled for the current year, as management believes that these will be significantly collected in due course.

On that basis a total provision for credit losses of R271.0m (2021: R254.8m) was raised as at 31 December 2022. The provision mainly relates to students who are experiencing financial difficulties. The breakdown of the credit loss allowance for student receivables is indicated below.

Expected credit loss rate: 2022	Estimated gross carrying amount at default	Expected credit loss	Percentage expected credit loss
	R'000	R'000	%
Student receivables - NSFAS	3,114	-	-
Student receivables - enrolled for current year	245,232	-	-
Student receivables - enrolled for previous years (1 to 2 years past due)	97,585	75,410	77%
Student receivables - enrolled for previous years (> 2 years past due)	195,638	195,638	100%
	541,569	271,048	
	Estimated gross carrying amount at default	Expected credit loss	Percentage expected credit loss
Expected credit loss rate: 2021		51000	
	R'000	R'000	%
Student receivables - NSFAS	5,018	-	-
Student receivables - enrolled for current year	246,080	-	-
Student receivables - enrolled for previous years (1 to 2 years past due)	98,372	81,409	83%
Student receivables - enrolled for previous years (> 2 years past due)	173,451	173,451	100%
	522,921	254,860	
		2022	2021
Movements in the provision for credit losses are as follows:		R'000	R'000
Beginning of year		254,860	214,170
Provision for credit losses		44,982	46,298
Receivables written off during the year		(28,794)	(5,608)
End of year		271,048	254,860
-			

The creation and release of credit losses on student receivables have been included in 'other operating expenses' in the statement of profit or loss. Amounts charged to the statement of profit or loss are generally written off when there is no expectation of recovering any additional amounts. No collateral is held as security.

For additional disclosure of the credit risk relating to student receivables, refer to note 31.1.B.

Credit risk of research and trade receivables

To measure the expected credit losses, research and other trade receivables have been grouped together based on shared credit risk characteristics and days past due.

The expected loss rates are based on the historical payment profiles and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of the customers to settle the receivables. On that basis, the loss allowance was determined as follows for other trade receivables:

Expected credit loss rate: 2022	Estimated gross carrying amount at default	Expected credit loss	Percentage expected credit loss
	R'000	R'000	%
Current	48,761	1,744	4%
1 to 6 months past due	209,296	5,132	2%
> 6 months past due	107,257	39,400	37%
	365,314	46,276	
	Estimated gross carrying amount	Expected credit loss	Percentage expected credit
Expected credit loss rate: 2021	at default		loss
	R'000	R'000	%
Current	37,726	1,668	4%
1 to 6 months past due	224,692	1,538	1%
> 6 months past due	64,809	34,628	53%
	327,227	37,834	
		2022	2021
Movements in the provision for credit losses are as follows:		R'000	R'000
Beginning of year		37,834	35,819
Provision for credit losses		12,863	7,134
Receivables written off during the year		(4,421)	(5,119)
End of year	_	46,276	37,834

Research and other receivables are written off where there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the group and a failure to make contractual payments for a period of greater than 120 days past due.

Credit losses on other receivables are presented within other operating expenses in the statement of profit or loss. Subsequent recoveries of amounts previously written off are credited against the same line item.

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value. No collateral is held as security.

Cash and cash equivalents	2022 R'000	2021 R'000
Net cash on hand and at bank	462,322	362,015
Short-term investments		
Cash with fund managers	2,454,926	2,700,259
Short-term deposits	82,689	90,644
	2,537,615	2,790,903
	2,999,937	3,152,918

The weighted average effective interest rate on short-term bank deposits was 5.6% (2021: 4.4%).

9.

Cash balances held by the University of R5.1m (2021: R5.5m) are not available for general use as they are secured as bank guarantees. The carrying amounts of cash and cash equivalent approximate their fair value.

Cash with fund managers includes short-term, highly liquid investments with original maturities of three months or less that are readily convertible and which are subject to an insignificant risk of changes in value.

10. Post-employment benefits

10.1 Defined benefit pension plan

In terms of section 1 of the Income Tax Act of 1962 and registration in terms of the Financial Sector Conduct Authority, the UP Pension Fund is classified as a pension fund. The Fund provides defined benefits payable in a combination of lump sums and pensions on disability, death or retirement. A lump sum is payable on withdrawal. The assets of the UP Pension Fund are held independently of the University's assets in a separate trustee-administered fund. The responsibility for governance of the plan, including investment decisions and contribution schedules, is with the Board of Trustees. The UP Pension Fund is wholly funded and is limited to the existing members. A statutory valuation by an independent actuary is done at least every three years in terms of the Pension Fund Act. The latest statutory actuarial valuation was carried out at 31 December 2021. The fund is also valued annually for financial statement reporting in terms of IAS19. Based on the annual actuarial valuation the assets of the fund are adequate to cover the liabilities associated with the fund.

The asset allocation between the main asset classes is determined by the Fund's Trustees. The investments within each asset class are managed by external investment managers in diversified investment portfolios.

The Fund ensures that the investment positions are managed within an asset-liability matching framework that has been developed to have long term investments that are in line with the associated obligations. Within this framework, the Fund has invested in equities, bonds (local and international), as well as listed property and fixed interest investments whose maturities will match the obligations as they fall due. The Fund does not make use of derivatives to manage its risk. Investments are well diversified to mitigate associated investment risk. There are no entity-specific or plan-specific risks, other than those detailed below, and no significant concentrations of risk.

Asset volatility:

The plan liability is calculated using a discount rate set with reference to government bond yields. If plan assets perform below this yield, this will create a deficit.

Changes in bond yields:

A decrease in government bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plan's bond holdings.

Inflation risk:

The University's pension obligation is linked to inflation and higher inflation will lead to a higher liability. The majority of the plan's assets are either unaffected by (fixed interest bonds) or loosely correlated with (equities) inflation, therefore an increase in inflation will also increase the obligation.

Life expectancy:

The majority of the plan's obligations are to provide benefits for the life of the member, spouse and dependents, so increases in life expectancy will result in an increase in the plan's liability.

The University accounts for post-employment benefits according to its accounting policy note 12.

Balance at the end of the year	2022 R'000	2021 R'000
Present value of funded obligations	(1,972,379)	(2 078 035)
Fair value of plan assets	2,281,744	2,403,595
Defined benefit asset recognised	309,365	325,560

The movement in the defined benefit obligation over the year is as follows:	2022 R'000	2021 R'000
Present value of obligation at the beginning of the period	2,078,035	1,870,649
Interest expense	242,294	229,475
Current service cost	25,341	23,255
Member contributions	9,279	9,857
Benefits paid	(155,900)	(164 556
•	· · · ·	109,355
Remeasurements Present value of obligation at the end of the period	(226,670) 1,972,379	2,078,035
As at the last valuation date (31 December), the present value of the defined benefit obligation comprised of approximately R727.3m (2021: R800.9m) relating to active employees, R1,243.1m (2021: R1,206.3m) relating to pensioners and R2.0m (2021: R70.8m) relating to the notional pensioner account.	1,012,010	
Remeasurements on the obligation are made up of the following:		
Actuarial (gains) / loss from change in financial assumptions	(57,995)	69,812
Experience (gains) / losses	(168,675)	39,543
	(226,670)	109,355
The movement in the fair value of plan assets over the year is as follows:	2022 R'000	2021 R'000
Fair value of plan assets at the beginning of the period	2,403,595	2,115,537
Interest income	281,001	260,398
Member contributions	9,279	9,857
Employer contributions	19,176	20,372
Benefits paid	(155,900)	(164,556)
Remeasurements: (lower)/excess return on plan assets	(275,407)	161,987
Fair value of plan assets at the end of the period	2,281,744	2,403,595
The amounts recognised in the statement of profit or loss and statement of comprehensive income are as follows:	2022 R'000	2021 R'000
Current service cost	25,341	23,255
Interest expense	242,294	229,475
Interest income	(281,001)	(260,398)
Remeasurements on the obligation	(226,670)	109,355
Remeasurements on the plan assets	275,407	(161,987)
	35,371	(60,300)
In profit or loss:		
Net interest (income) on defined benefit plan	(38,707)	(30,923)
Personnel costs: Current service costs	25,341	23,255
In other comprehensive income:		
Remeasurements on defined benefit plan	48,737	(52,632)
	35,371	(60,300)
The principal actuarial assumptions used were as follows:	2022	2021
Discount rate	12.2%	12.0%
Pension increase rate	6.0%	6.0%
Inflation rate	6.0%	6.0%
Salary inflation at age 35	9.5%	9.5%
Salary inflation at age 40	9.0%	9.0%
Salary inflation at age 45	8.5%	8.5%
Salary inflation at age 60	7.0%	7.0%
Number of employees who are members of the UP Pension Fund	128	143
Number of pensioners of the UP Pension Fund	672	678
	0/2	0/0

PA(90)

PA(90)

The fair value of the asset allocation of the plan assets as at the valuation date is as follows:	2022	2021
SA Equity	139,750	143,593
SA Bonds	1,526,870	1,594,269
Listed property, cash and cash equivalents and other	149,361	132,638
International Equity	465,763	533,095
	2,281,744	2,403,595

Sensitivity analysis

The defined benefit obligation would be affected by changes in the following actuarial assumptions:

Discount rate	Change in assumption 1%	Increase assumption Decrease by 8.7%	Decrease assumption Increase by 10.2%
Salary growth	1%	Increase by 1.2%	Decrease by 1.1%
Pension growth	1%	Increase by 8.8%	Decrease by 3.1%
		2 years older	2 years younger
Post retirement mortality assumption		Decrease by 1.6%	Increase by 5.7%

The above sensitivity analyses are based on a change in one assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit calculated with the projected unit credit method at the end of the reporting period) has been applied when calculating the pension liability recognised within the statement of financial position.

Estimated employer contributions to be paid for the financial year ending 31 December 2023 is expected to be R21.4m.

There are no special funding arrangements that will affect future contributions.

The weighted average duration of the defined benefit obligation is estimated at 13.3 years.

10.2 Defined benefit medical plan

The University of Pretoria operates one post-employment medical benefit scheme. In accordance with the existing personnel practice, the Council has undertaken to make certain medical fund contributions on behalf of retired staff and future retirees. The fund is not open to employees joining the University after 1 August 2002. The method of accounting and the frequency of valuations are similar to those used for defined benefit pension schemes. The responsibility for governance of the plan, including investment and contribution schedules, is with the University.

The asset allocation between the main asset classes is determined by the Investment Committee of Council. The investments within each asset class are managed by external investment managers in diversified investment portfolios.

The Fund ensures that the investment positions are managed within an asset-liability matching framework that has been developed to have long term investments that are in line with the associated obligations. Within this framework, the Plan has invested in equities, bonds (local and international) as well as fixed interest investments whose maturities will match the obligations as they fall due. The Plan does not make use of derivatives to manage its risk. Investments are well diversified to mitigate associated investment risk. There are no entity-specific or plan-specific risks, other than those detailed below, and no significant concentrations of risk.

Asset volatility:

The plan liability is calculated using a discount rate set with reference to government bond yields. If plan assets perform below this yield, this will create a deficit.

Changes in bond yields:

A decrease in government bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the Plan's bond holdings.

Inflation risk:

The University's medical obligation is linked to inflation, and higher inflation will lead to a higher liability. The majority of the plan's assets are either unaffected by (fixed interest bonds) or loosely correlated with inflation, meaning that an increase in inflation will also increase the obligation.

The University accounts for post-employment benefits according to its accounting policy note 12.

Balance at the end of the year	2022 R'000	2021 R'000
Present value of funded obligations	(1,233,054)	(1,262,019)
Fair value of plan assets	1,565,730	1,685,858
Defined benefit asset recognised	332,676	423,839
The movement in the defined benefit obligation over the year is as follows:	2022 R'000	2021 R'000
Present value of obligation at the beginning of the period	1,262,019	1,222,876
Interest expense	134,460	137,388
Current service cost	13,716	13,979
Benefits paid	(93,029)	(90,979)
Remeasurements	(84,112)	(21,245)
Present value of obligation at the end of the period	1,233,054	1,262,019
As at the last valuation date (31 December), the present value of the defined benefit obligation comprised of approximately R292.9m (2021: R345.5m) relating to active employees and approximately R940.2m (2021: R916.5m) relating to pensioners.		
Remeasurements on the obligation are made up of the following:		
Actuarial (gains) from change in financial assumptions	(106,334)	(23,667)
Actuarial losses from change in demographic assumptions	22,222	2,422
	(84,112)	(21,245)
	2022	2021
The movement in the fair value of plan assets over the year is as follows:	R'000	R'000
Fair value of plan assets at the beginning of the period	1,685,858	1,446,679
Interest income	203,989	167,815
Benefits paid	(93,029)	(90,979)
Remeasurements: (lower)/excess return on plan assets	(231,088)	162,343
Fair value of plan assets at the end of the period	1,565,730	1,685,858
The amounts recognised in the statement of profit or loss and statement of comprehensive income are as follows:	2022 R'000	2021 R'000
Current service cost	13,716	13,979
Interest expense	134,460	137,388
Interest income	(203,989)	(167,815)
Remeasurements on the obligation	(84,112)	(21,245)
Remeasurements on the plan assets	231,088	(162,343)
	91,163	(200,036)

Net interest (income) on defined benefit plan (69,52	9) (30,427)
	(30,421)
Personnel costs: Current service costs 13,71	6 13,979
In other comprehensive income:	
Remeasurements on defined benefit plan 146,97	6 (183,588)
91,16	3 (200,036)
The principal actuarial assumptions used were as follows: 202	22 2021
Medical cost inflation 9.2	% 9.0%
Discount rate 12.1	% 11.0%
Members - active 45	3 513
Members - pensioner 1,28	5 1,261
Retirement age 65 year	s 65 years
Mortality rate:	
Pre-retirement mortality Tabl	e Table
Males SA 72 -7	7 SA 72 -77
Females (Rated down by 3 years)SA 72 -7	7 SA 72 -77
Post-retirement mortality	
Males (Rated down by 1 year) PA (90)) PA (90)
Females (Rated down by 1 year)PA (90))) PA (90)
Rate of ill-health early retirement 40% (SA 56-62	2) 40% (SA 56-62)
Mortality for ill-health retirements = a normal pensioner 10 years older	
The fair value of the asset allocation of the plan assets as at the valuation date is as follows: 202	22 2021
SA Equity 206,97	7 248,150
SA Bonds 897,41	4 913,488
International Equity 461,33	9 524,220
1,565,73	0 1,685,858

Sensitivity analysis

The defined benefit obligation would be affected by changes in the following actuarial assumptions:

	Change in assumption	Increase assumption	Decrease assumption
Discount rate	1%	Decrease by 8.0%	Increase by 9.3%
Healthcare cost inflation	1%	Increase by 9.0%	Decrease by 7.9%

The above sensitivity analyses are based on a change in one assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit calculated with the projected unit credit method at the end of the reporting period) has been applied when calculating the medical liability recognised within the statement of financial position.

There are no special funding arrangements that will affect future contributions.

Expected employer contributions to post employment medical benefits plans for the year ending 31 December 2023 is R11.1m.

The discounted weighted average duration of the defined benefit obligation is estimated at 10.3 years.

10.3 Defined benefit/contribution provident plan

In terms of section 1 of the Income Tax Act of 1962 and registration in terms of the Financial Sector Conduct Authority, the UP Provident Fund is classified as a provident fund. The Fund provides lump sum payments to members on retirement, retrenchment and withdrawal. The benefits payable on retirement, retrenchment and withdrawal are defined contribution benefits. The Fund also provides lump sum benefits payable as lifelong pensions on death and recognised disability. The benefits payable on death and on recognised disability are defined benefits. The University of Pretoria Provident Fund is a defined contribution plan, but it also contains a defined benefit component. The responsibility for governance of the Fund, including investment and contribution schedules, is with the Board of Trustees. During 2019, the University established an alternative benefit structure (retirement funding and risk benefits) for employees to adopt on a voluntary basis. Staff were afforded a once-off opportunity to join the FundsAtWork (FAW) Umbrella Provident Fund. The FAW Umbrella Fund is a "defined contribution" fund.

The assets of the UP Provident Fund are held independently of the University's assets in a separate trusteeadministered fund. A statutory valuation is done at least every three years as required by the Pension Fund Act. The latest statutory actuarial valuation was carried out at 31 December 2021. The fund is also valued annually for financial statement reporting in terms of IAS19. Based on the annual actuarial valuation the assets of the fund are adequate to cover the liabilities associated with the fund.

The asset allocation between the main asset classes is determined by the Fund's Trustees. The investments within each asset class are managed by external investment managers in diversified investment portfolios.

The Fund ensures that the investment positions are managed within an asset-liability matching framework that has been developed to achieve long term investments that are in line with the associated obligations. Within this framework, the Fund has invested in equities, bonds (local and international) as well as listed property and fixed interest investments whose maturities will match the obligations as they fall due. The Fund does not make use of derivatives to manage its risk. Investments are well diversified to mitigate associated investment risk. There are no entity-specific or plan-specific risks, other than those detailed below, and no significant concentrations of risk.

Asset volatility:

The plan liability is calculated using a discount rate set with reference to government bond yields. If plan assets perform below this yield, this will create a deficit.

Changes in bond yields:

A decrease in government bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plan's bond holdings.

Inflation risk:

The University's pension obligation is linked to inflation, and higher inflation will lead to a higher liability. The majority of the plan's assets are either unaffected by fixed (interest bonds) or loosely correlated with inflation, meaning that an increase in inflation will also increase the obligation.

Life expectancy:

The majority of the plan's obligation is to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plan's liability.

The University accounts for post-employment benefits according to its accounting policy note 12.

Balance at the end of the year	2022 R'000	2021 R'000
Present value of funded obligations	(3,962,268)	(4,056,099)
Fair value of plan assets	3,972,392	4,066,667
Defined benefit asset recognised	10,124	10,568

he movement in the defined contribution obligation over the year is as follows:	2022 R'000	2021 R'000
Present value of obligation at the beginning of the period	4,056,099	3,375,573
Interest expense	448,105	403,154
Current service cost	306,977	289,494
Past service cost	-	241
Member contributions - transfer values	31,741	33,684
Benefits paid	(452,041)	(298,166)
Remeasurements	(428,613)	252,119
Present value of obligation at the end of the period	3,962,268	4,056,099

As at the last valuation date (31 December), the present value of the defined benefit obligation comprised of approximately R3,472.9m (2021: R3,568.8m) relating to active employees, approximately R270.2m (2021: R287.8m) relating to pensioners, approximately R72.9m (2021: R67.1m) relating to reserves and approximately R146.3m (2021: R132.3m) relating to the notional pensioner account.

Remeasurements on the obligation are made up of the following:

remode a childre on the obligation are made up of the following.		
Experience adjustments	(428,613)	252,119
	(428,613)	252,119
The movement in the fair value of plan assets over the year is as follows:	2022	2021
	R'000	R'000
Fair value of plan assets at the beginning of the period	4,066,667	3,386,170
Interest income	449,289	404,401
Employer contributions	170,867	159,888
Member contributions	136,110	129,606
Member contributions - transfer values	31,741	33,684
Benefits paid	(452,041)	(298,166)
Remeasurements: (lower)/excess return on plan assets	(430,241)	251,084
Fair value of plan assets at the end of the period	3,972,392	4,066,667
The amounts recognised in the statement of profit or loss and statement of comprehensive income are	2022	2021
as follows:	R'000	R'000
Current service cost	306,977	289,494
Past service cost	-	241
Interest expense	448,105	403,154
Interest income	(449,289)	(404,401)
Remeasurements on obligation	(428,613)	252,119
Remeasurements on plan assets	430,241	(251,084)
	307,421	289,523
In profit or loss:		
Net interest expense on defined benefit plan	(1,184)	(1,247)
Personnel costs: Current service costs	306 077	280 101

Net interest expense on defined benefit plan	(1,184)	(1,247)
Personnel costs: Current service costs	306,977	289,494
Personnel costs: Past service costs	-	241
In other comprehensive income:		
Remeasurements on defined benefit plan	1,628	1,035
	307,421	289,523

The principal actuarial assumptions used were as follows:	2022	2021
Discount rate	12.2%	11.2%
Pension increase rate	6.0%	6.0%
Inflation rate	6.0%	6.0%
Number of employees who are members of the UP Provident Fund	3,073	3 203
Number of pensioners of the UP Provident Fund	337	332
Post-retirement mortality tables (less 1 year plus mortality improvements of 0.5% from 2007)	PA(90)	PA(90)
The fair value of the asset allocation of the plan assets as at the valuation date is as follows:	2022	2021
SA Equity	1,038,426	1,150,221
SA Bonds	725,783	709,990
Listed property, cash and cash equivalents and other	1,097,806	1,193,691
International Equity	1,110,377	1,012,765
	3,972,392	4,066,667

Sensitivity analysis

The defined benefit obligation would be affected by changes in the following actuarial assumptions:

	Change in assumption	Increase assumption	Decrease assumption
Discount rate	1%	No effect	No effect
Pension growth	1%	No effect	No effect
		2 years	2 years
		older	younger
Post retirement mortality assumption		No effect	No effect

The above sensitivity analyses are based on a change in one assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit calculated with the projected unit credit method at the end of the reporting period) has been applied when calculating the provident liability recognised within the statement of financial position.

Estimated employer contributions to be paid for the financial year ending 31 December 2023 is R196.1m.

The University has approved annual increases, effective 1 April 2017, in contributions to the provident fund of 1% (0.5% contribution by the University and 0.5% contribution by employees) for a period of 5 years. Employees were requested to take up this option on or before 28 February 2017. The total increase in contribution, phased in over 5 years will therefore be 5% per employee.

The weighted average duration of the defined benefit obligation is estimated at 10.5 years.

10.4 Group life assurance liability

The University provides an insured group life benefit of 4 times annual salary for all employees, payable on the death of the employee. When an employee retires, he/she can elect to remain on the scheme from retirement up to age 70 years. The post retirement benefit remains at 4 times annual salary until age 65. Between age 65 and 70, the benefit however reduces to 1 times annual salary. The employer pays 75% of the scheme premium and the employee pays 25%.

There are no entity-specific or plan-specific risks, other than those detailed below, and no significant concentrations of risk.

Inflation risk:

The University's obligation is linked to inflation, and higher inflation will lead to a higher liability.

Life expectancy:

The majority of the obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plan's liability.

The University accounts for post-employment benefits according to its accounting policy note 12.

Balance at the end of the year	2022 R'000	2021 R'000
Present value of obligations	(76,378)	(78,432)
—		
	2022	2021
The movement in the defined benefit obligation over the year is as follows:	R'000	R'000
Present value of obligation at the beginning of the period	78,432	39,572
Interest expense	8,914	4,729
Current service cost	5,643	2,849
Past service cost	339	192
Benefits paid	(5,862)	(3,049)
Remeasurements on obligation	(11,088)	34,139
Present value of obligation at the end of the period	76,378	78,432
As at 31 December, the present value of the obligation comprised of approximately R55.7m (2021: R58.4m) relating to active employees and R20.7m (2021: R20.0m) relating to retired employees.		
Remeasurements on the obligation are made up of the following:		
Actuarial (gains) / loss from change in financial assumptions	(6,143)	3,566
Experience (gains) / loss	(4,945)	30.573
	(11,088)	34,139
—		
The amounts recognised in the statement of profit or loss and statement of comprehensive income are as follows:	2022 R'000	2021 R'000
Employer contribution	5,982	3,041
Interest expense	8,914	4,729
Remeasurements on obligation	(11,088)	34,139
	3,808	41 909
In profit or loss:	0.014	4 700
Net interest expense	8,914	4,729
Personnel costs: Current service costs	5,643	2,849
Personnel costs: Past service costs	339	192
In other comprehensive income:	(((200))	
Remeasurements on obligation	(11,088)	34,139
-	3,808	41 909
The principal actuarial assumptions used were as follows:	2022	2021
Discount rate	12.4%	11.4%
Pension increase rate	6.0%	6.0%
Inflation rate	6.0%	6.0%
Salary inflation at age 35	9.5%	9.5%
Salary inflation at age 40	9.0%	9.0%
Salary inflation at age 45	8.5%	8.5%
Salary inflation at age 65	7.0%	7.0%
Number of employees who are expected to take up the GLA benefit	4,843	4,951
Number of retirees	448	441
Post-retirement mortality tables (less 1 year plus mortality improvements of 0.5% from 2007)	PA(90)	PA(90)
		. / (00)

Sensitivity analysis

The group life assurance obligation would be affected by changes in the following actuarial assumptions:

	Change in assumption	Increase assumption	Decrease assumption
Interest rate	1%	Decrease by 7.1%	Increase by 8.0%
Premium rate	10%	Increase by 10.0%	Decrease by 10.0%

Reducing the resignation rate assumption by 50% results in an increase to the obligation of 5.8%.

The above sensitivity analyses are based on a change in one assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

Estimated employer contributions to be paid for the financial year ending 31 December 2023 is R5.2m.

The weighted average duration of the defined benefit obligation is estimated at 12.3 years.

10.5 Fair value of post-employment benefit obligations

The following table analyses the obligation on post-employment benefits carried at fair value by valuation method. The different levels have been defined as follows:

Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1). Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (Level 2). Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (Level 3).

	Level 1	Level 2	Level 3	Total 2022
	R'000	R'000	R'000	R'000
Post-employment benefit obligation	-	-	(7,244,079)	(7,244,079)
Pension plan obligation	-	-	(1,972,379)	(1,972,379)
Medical plan obligation	-	-	(1,233,054)	(1,233,054)
Group life assurance obligation	-	-	(76,378)	(76,378)
Provident plan obligation	-	-	(3,962,268)	(3,962,268)

The present value of the defined benefit calculated with the projected unit credit method at the end of the reporting period has been applied when calculating the pension, medical, provident and group life liabilities recognised within the statement of financial position.

The following table outlines the effect of unobservable inputs on the fair value of the post-employment benefit obligations:

Description	Valuation techniques	Unobservable inputs	Range of unobservable inputs (probability - weighted average)	Relationships of unobservable inputs to fair value
Pension plan obligation	Projected unit credit method	Discount rate	12.2% per annum (13.3-year Government bond)	The higher the discount rate, the lower the obligation
J		Inflation rate	6.0% per annum	The higher the inflation rate, the higher the obligation
		Salary increase rate	7.0% per annum	The higher the salary growth, the higher the obligation
		Pension increase rate	6.0% per annum	The higher the pension growth, the higher the obligation
		Duration of the fund obligation	Estimated at 13.3 years	The higher the duration of the fund liabilities, the lower the obligation
Post -	Projected	Discount rate	12.1% per annum	The higher the discount rate, the lower the obligation
employment		Medical cost inflation	9.2% per annum	The higher the inflation rate, the higher the obligation
medical plan obligation	metnoa	Duration of the fund obligation	Estimated at 10.3 years	The higher the duration of the fund liabilities, the lower the obligation
Provident plan obligation	Projected unit credit method	Discount rate	12.2% per annum (10.5-year Government bond)	The higher the discount rate, the lower the obligation
		Inflation rate	6.0% per annum	The higher the inflation rate, the higher the obligation
		Pension increase rate	6.0% per annum	The higher the pension growth, the higher the obligation
		Duration of the fund obligation	Estimated at 10.5 years	The higher the duration of the fund liabilities, the lower the obligation
Group life	Projected	Discount rate	12.4% per annum	The higher the discount rate, the lower the obligation
assurance	unit credit	Inflation rate	6.0% per annum	The higher the inflation rate, the higher the obligation
obligation	method	Salary increase rate	7.0% per annum	The higher the salary growth, the higher the obligation
		Duration of the scheme obligation	Estimated at 12.3 years	The higher the duration of the fund liabilities, the lower the obligation

11. Lease liabilities

	R'000	R'000
Non-current liabilities	682	221
Current liabilities	615	1,479
	1,297	1,700

2022

2021

It is group policy to lease office equipment under leases. The average lease term is two to three years for office equipment and the average effective borrowing rate is 6.0%.

Future minimum rentals payable under non-cancellable leases as at 31 December are as follows:

Within one year	615	1,479
Two to five years	777	318
	1,392	1,797
Income and expenses related to leases		
Interest expense on lease liabilities included in finance expense	118	199
Leases of low-value assets included in operating expenses	795	933
Short-term lease expenses included in operating expenses	11,900	866

The total cash outflow for leases in 2022 was R14,4m (2021: R3.8m). Cash outflows from leases with a financing element amounted to R1,6m (2021: R2m).

12.	Trade payables, accruals and other liabilities	2022 R'000	2021 R'000
	Financial liabilities		
	Trade payables	322,418	355,037
	Accrued expenses	174,206	175,641
	Payroll	1,332	2,998
	Other payables	37,422	29,455
		535,378	563,131
	Non-financial liabilities		
	Leave with gratuity value	6,227	9,957
	Non-accumulative leave	255,051	277,237
		261,278	287,194
		796,656	850,325

The carrying amounts of trade and other payables are considered to be the same as their fair values, due to their short-term nature.

Accrued expenses includes statutory payments relating to the December payroll and expenses incurred on various contract projects.

Leave accrual

Members of staff with leave with gratuity value to their credit at the end of 2006 had a choice of either disbursing the accumulated leave (as at 31 December 2006) to them at the end of March 2007 or to retain such leave credits in the system at the value as determined above. Leave credits retained will be disbursed to the relative staff member upon termination of service or on request at any time after March 2007, at the value as at 31 December 2006. As it is difficult to predict which portion of the liability will be disbursed to staff in future periods, the total accrual is treated as current.

The portion of non-accumulative leave that is not used within a period of twelve months, expires at the end of the period. For this reason, the non-accumulative leave is treated as current.

13. Deferred income

	Asset grants income R'000	Other grants income R'000	Total 2022 R'000	Total 2021 R'000
At 1 January	1,652,954	922,717	2,575,671	2,559,100
Deferred:				
Income received during the year	-	835,996	835,996	884,066
Income recognised during the year	(17,238)	(918,913)	(936,151)	(867,495)
As at 31 December	1,635,716	839,800	2,475,516	2,575,671
Current	17,238	839,801	857,039	939,958
Non-current	1,618,477	-	1,618,477	1,635,713
	1,635,715	839,801	2,475,516	2,575,671

Asset grant income

Grants relating to infrastructure are received in advance. Once the infrastructure is complete and "ready for use", the grant is recognised as income over the expected useful life of the asset. The balance is recognised as deferred income in the statement of financial position.

Other grant income

The group recognises grants received to compensate for expenses incurred, as income. These grants are subject to different requirements and are recognised over a period per the terms of the grant. The recognition of this income is limited to the expenses incurred. The balance is recognised as deferred income in the statement of financial position.

14. Contract liabilities

	Contractual income R'000	Tuition income R'000	Total 2022 R'000	Total 2021 R'000
At 1 January Deferred:	84,145	105,240	189,385	233,920
Income received during the year	82.814	97.550	180.364	167,886
Income recognised during the year	(84,145)	(105,240)	(189,385)	(212,421)
As at 31 December	82,814	97,550	180,364	189,385

Commercial contract income is recognised when the performance obligations have been met in the financial period in which the service is rendered. If the services rendered exceed the payments, a contract asset is recognised. If the payment exceeds the services rendered, a contract liability is recognised.

Tuition fee income is recognised over a period of time. If at the end of the annual financial year performance obligations remain outstanding, a contract liability is recognised for any consideration received for such services.

Transaction price allocated to:

15.

The aggregate amount of the transaction price allocated to long-term contracts with customers, that are partially		
fulfilled at the end of the accounting period, is expected to be fulfilled during the following financial years:	2022	2021
	R'000	R'000
2022	-	142,309
2023	165,299	41,215
2024	10,405	5,861
2025	4,660	-
	180,364	189,385
Student credits and deposits	2022	2021
•	R'000	R'000
Students enrolled for current year	251,947	244,467
Students enrolled for previous years	178,092	153,959
Student deposits	174	174
Other deposits	-	4,569
-	430,213	403,169

Refer to note 31.1 for an analysis of student credits and deposits into relevant maturity groupings based on the remaining period.

16.	Agency funds	2022 R'000	2021 R'000
	DHET monitoring and evaluation funds	41,572	86,813
	Estate funds	13,419	18,737
	External bursaries	35,841	26,261
	NSFAS student funding	503,621	229,321
	SRC club assets	5,454	8,389
	Other	4,359	8,231
		604,266	377,752

17. Revenue

The group disaggregates the revenue from customers as follows:

2022 R'000	2021 R'000
2,871,819	2,840,343
175,301	168,812
22,542	22,948
61,248	64,841
35,067	35,101
20,000	-
3,909	-
4,625	9,945
3,194,511	3,141,990
	R'000 2,871,819 175,301 22,542 61,248 35,067 20,000 3,909 4,625

The total amount of state subsidies deferred during the year was R84.2m (2021: R81.8m). State appropriations subsidies and grants received by the University are accounted for as grants related to income.

17.2 Tuition and other fee income

2 Tuition and other fee income	2022 R'000	2021 R'000
Tuition fee income:	K 000	K 000
Undergraduate	1,781,724	1,706,497
Postgraduate	369,025	349,524
	2,150,749	2,056,021
Accommodation and food income	482,339	405,966
	2,633,088	2,461,987

The sector was limited to a 4.2% increase in tuition fees and a 6.2% increase in accommodation fees for 2022.

Bursaries, awarded by the University, amounting to R134.7m (2021: R136.1m) were offset against tuition fee income. Total bursaries and loans awarded, controlled and administered by the University, on behalf of third parties and the University amounts to R2,297.8m (2021: R2,156.7m).

17.3 Income from contracts and services	2022 R'000	2021 R'000
Training services	375,399	355,522
Research services	685,492	952,888
Other services	632,711	193,190
	1,693,602	1,501,600
17.4 Donations and gifts	2022	2021
	R'000	R'000
Donations and gifts received from external parties	197,051	152,297
17.5 Timing of revenue recognition	2022	2021
	R'000	R'000
At a point in time	241,026	182,965
Over a period of time	7,477,226	7,074,909
	7,718,252	7,257,874
18. Interest and dividends	2022	2021
	R'000	R'000
Interest income	222,375	149,417
Dividend income	219,295	192,818
	441,670	342,235

Defined benefit pension plan R000 R000 Interest expense 242,284 228,475 Interest (income) (281,001) (280,389) Net inferest (income) (38,707) (39,823) Post-employment medical plan (38,707) (30,823) Interest (income) (202,389) (107,745) Net interest (income) (69,529) (50,427) Defined contribution provident plan (117,815) (404,401) Interest expense (48,105) (404,401) Interest (income) (49,289) (40,401) Net interest (income) (118,92) (124,72) Oroup life assurance scheme (118,92) (124,72) Interest (income) recognised in the statement of profit or loss. (100,506) (57,888) 20 Net fair value gains on financial assets (23,422) 2022 201rg the year, the following gains were recognised in profit or loss: (12,86,721) 2,957,789 21 Personnel costs (12,86,721) 2,957,789 2,227,789 21 Personnel costs: defined benefit pension plan (refer note	19.	Net interest income on defined benefit/contribution plans	2022	2021
Interest (ncome) 242,294 228,475 Interest (ncome) (281,001) (280,398) Net interest (ncome) (38,707) (30,322) Post-employment medical plan (137,388) (137,388) Interest (ncome) (203,989) (167,815) Net interest (income) (203,989) (167,815) Interest (ncome) (244,401) (1244,209) Interest (income) (448,105 403,154 Interest (income) (448,105 403,154 Interest (income) (11,184) (1247) Group life assurance scheme (11,184) (1247) Interest (income) recognised in the statement of profit or loss. (100,500) (57,869) 20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss: 8,914 3,242 Saiar secognised in the statement of profit or loss: 2022 2021 Net fair value gains on financial assets (21,287,71) 2,957,789 21. Personnel costs Cfined benefit pension plan (refer note 10.1) 25,541 2,3255<			R'000	R'000
Interest (income) (281.001) (280.389) Net interest (ncome) (38.707) (30.323) Post-employment metical plan Interest (exponse 134.460 137.388 Interest (exponse) (20.3989) (167.315) Net interest (income) (20.3989) (30.427) Defined contribution provident plan Interest (exponse) (481.05 403.154 Interest (income) (404.401) (1.247) Group life assurance scheme Interest (exponse (1.149) (1.247) Group life assurance scheme (1.000.666) (67.869) Net interest (income) recognised in the statement of profit or loss. (100.666) (67.869) 20 Net fair value gains on financial assets 68.442 93.242 Gains recognised in the statement of profit or loss: (12.86,721) 2.997.789 Net fair value gains on financial assets 68.442 93.242 Gains recognised in the statement of profit or loss: (12.86,721) 2.997.789 2022 2021 2022 2021 21 Personnel costs 66.442 93.242 Salarise a			242 204	220 475
Net interest (income) (38,707) (39,323) Post-employment medical plan Interest (income) (38,707) (39,323) Net interest (income) (20,3890) (167,315) Net interest (income) (20,3890) (167,315) Defined contribution provident plan Interest expense (48,105) 403,154 Interest (income) (11,164) (11,264) Vertice (income) (11,164) (12,27) Group life assurance scheme Interest expense 8,914 4,729 Net interest (income) recognised in the statement of profit or loss. (100,506) (57,368) 20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss and other comprehensive income: R'000 R'000 Gains recognised in other statement of profit or loss: (12,26,721) 2,967,780 2,967,780 Lurrent and past service costs: defined benefit mension plan (refer note 10.1) 2,3,341 2,3255 2,3255 Current and past service costs: defined benefit pension plan (refer note 10.3) 306,977 289,735 2,442 Personnel costs 4,313,666 <td< td=""><td></td><td></td><td></td><td></td></td<>				
Post-employment medical plan Interest expense 134,460 137,388 Interest (income) (203,989) (187,345) Net interest (income) (203,989) (30,427) Defined contribution provident plan Interest (income) (448,105 403,154 Interest (income) (448,289) (404,401) Net interest (income) (1,184) (1,247) Group life assurance scheme Interest (income) (1,184) (1,247) Outing the year, the following gains were recognised in profit or loss. (100,506) (57,868) 20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss and other comprehensive income: R000 R000 Gains recognised in the statement of profit or loss: 68,442 93,242 Gains recognised in other comprehensive income: 2022 2021 Net fair value gains on financial assets (1,286,721) 2,957,789 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 2,3255 Current and past service costs: defined benefit pension plan (refer note 10.3) 306,977 29,973 Current and past service costs: defined benefit pension plan (refer not				(, ,
Interest expense 134,460 137,389 Interest (income) (203,99) (167,815) Net interest (income) (30,427) Defined contribution provident plan interest expense 448,105 (403,154 Interest (income) (443,205) (404,401) Net interest (income) (1,184) (1,247) Group life assurance scheme interest expense 8,914 4,729 Net Interest (income) recognised in the statement of profit or loss. (100,566) (57,366) 20 Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss: 86,442 93,242 Gains recognised in other comprehensive income: 12,267,789 2,297,789 Vet fair value gains on financial assets (1,286,721) 2,297,789 Current and past service costs: defined benefit medical plan (refer note 10.1) 26,341 23,242 Salaries and wages 3,961,850 3,781,307 3,961,850 3,781,307 Current and past service costs: defined benefit medical plan (refer note 10.3) 306,977 22,957,789 Current and past service costs: defined benefit medical plan (refer note 10.3) 306,977			(30,707)	(30,923)
Interest (noome) (203,989) (187,815) Net interest (noome) (39,227) Defined contribution provident plan Interest expense 448,105 403,154 Interest (noome) (449,289) (404,401) Net interest (noome) (11,847) (11,247) Group life assurance scheme Interest expense 8,914 4,729 Net interest (income) recognised in the statement of profit or loss. (100,506) (57,866) 20 Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss: 86,442 93,242 Net fair value gains on financial assets 68,442 93,242 Gains recognised in the statement of profit or loss: 86,442 93,242 Net fair value gains on financial assets (1,286,721) 2,967,789 21 Personnel costs 2027 2021 R'000 R'000 R'000 R'000 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 23,255 Current and past service costs: defined benefit pension plan (refer note 10.3) 300,977 289,739 Current and past service costs: define		Post-employment medical plan		
Net interest (income) (69,529) (30,427) Defined contribution provident plan interest expense 448,105 403,154 Interest (income) (449,208) (404,401) Net interest (income) (1,184) (1,247) Group life assurance scheme interest expense 8,914 4,729 Net interest (income) recognised in the statement of profit or loss. (100,506) (57,866) 20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss and other comprehensive income: R'000 R'000 Gains recognised in the statement of profit or loss: (1,286,721) 2,967,789 Net fair value gains on financial assets 68,442 93,242 Gains recognised in other comprehensive income: (1,286,721) 2,967,789 Net fair value gains on financial assets 2022 2021 21. Personnel costs Genied benefit medical plan (refer note 10.1) 25,341 23,255 Current and past service costs: defined benefit pension plan (refer note 10.3) 2062,77,289,735 3,041 Current and past service costs: defined benefit pension plan (refer note 10.3) 26,97,789 3,041 3,741,307 <tr< td=""><td></td><td>Interest expense</td><td>134,460</td><td>137,388</td></tr<>		Interest expense	134,460	137,388
Defined contribution provident plan Interest expanse 448,105 403,154 Interest expanse 448,105 (404,401) Net interest (income) (1.184) (1.247) Group life assurance scheme Interest expanse 8,914 4.729 Net interest (income) recognised in the statement of profit or loss. (100,506) (57,869) 20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss: 88,442 93,242 Gains recognised in the statement of profit or loss: 68,442 93,242 Gains recognised in other comprehensive income: 88,442 93,242 Gains recognised in other comprehensive income: 1(.286,721) 2.957,789 Net fair value gains on financial assets 2022 2021 Rooo Rooo Rooo Rooo Salaries and wages 3.961,650 3.761,307 Current and past service costs: defined benefit pension plan (refer note 10.3) 265,41 23,265 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 289,735 Current and past service costs: defined contribution provident plan (refer note 10.3) 5,882 </td <td></td> <td>Interest (income)</td> <td>(203,989)</td> <td>(167,815)</td>		Interest (income)	(203,989)	(167,815)
Interest expense 448,105 403,154 Interest (income) (1,184) (1,247) Group life assurance scheme Interest expense 8,914 4,729 Net interest (income) recognised in the statement of profit or loss. (100,506) (57,868) 20. Net fair value gains on financial assets (100,506) (57,868) During the year, the following gains were recognised in profit or loss and other comprehensive income: Net fair value gains on financial assets 68,442 93,242 Gains recognised in the statement of profit or loss: Net fair value gains on financial assets 68,442 93,242 Gains recognised in other comprehensive income: Net fair value gains on financial assets (1,286,721) 2,957,789 21. Personnel costs R000 R000 R000 Salaries and wages 3,961,650 3,781,307 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 23,255 Current and past service costs: group life assurance scheme (refer note 10.4) 5,582 3,041,71 Varian dpast service costs: group life assurance scheme (refer note 10.4) 5,582 3,041,71 Varian dpast service costs: group life assurance scheme (refer note 10.4) 5,582 3,041 Varian dpast ser		Net interest (income)	(69,529)	(30,427)
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Net interest (income) (1,184) (1,247) Group life assurance scheme Interest expense 8,914 (1,247) Net interest (income) recognised in the statement of profit or loss. (100,506) (57,868) 20 Net fair value gains on financial assets (100,506) (57,868) During the year, the following gains were recognised in profit or loss: Net fair value gains on financial assets 2022 2021 Gains recognised in the statement of profit or loss: Net fair value gains on financial assets 68,442 93,242 Gains recognised in other comprehensive income: Net fair value gains on financial assets (1,286,721) 2,957,789 2022 2021 2022 2021 21. Personnel costs (effined benefit medical plan (refer note 10.1) 2,541, 12,255 Current and past service costs: defined benefit medical plan (refer note 10.3) 306,977 289,735 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 289,735 Current and past service costs: defined contribution provident plan (refer note 10.4) 4,337,738 4,109,177 Personnel costs 4,337,738 4,109,177 2,140 Viewei and past service costs: defined contribution provident plan (refer note 10.4) 5		•		
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Interest expense 8,914 4,729 Net interest (income) recognised in the statement of profit or loss. (100.506) (57,868) 20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss and other comprehensive income: 8000 R000 Gains recognised in the statement of profit or loss: 68,442 93,242 Gains recognised in other comprehensive income: 12,2957,789 12,2957,789 Net fair value gains on financial assets 61,442 93,242 Gains recognised in other comprehensive income: 11,286,721 2,957,789 Net fair value gains on financial assets 2022 2021 R000 R000 R000 R000 Salaries and wages 3,961,650 3,781,307 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 23,255 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 289,735 Current and past service costs: defined contribution provident plan (refer note 10.4) 4,313,666 4,111,317 Personnel costs 4,337,738 4,109,177 2,440 4,313,666 4,1111,317		Group life assurance scheme		
20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss: R'000 R'000 Gains recognised in the statement of profit or loss: 68,442 93,242 Gains recognised in other comprehensive income: 68,442 93,242 Gains recognised in other comprehensive income: 68,442 93,242 Net fair value gains on financial assets 618,442 93,242 Gains recognised in other comprehensive income: 1,286,721 2,957,789 Net fair value gains on financial assets (1,286,721) 2,957,789 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 23,225 Current and past service costs: defined benefit medical plan (refer note 10.2) 13,716 13,979 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 289,735 Current and past service costs: group life assurance scheme (refer note 10.4) 5,982 3,041 4,331,666 4,111,317 Personnel costs 4,337,738 4,109,177 Non-accumulative leave accrual 5,674 5,708 4,411,317 The number of persons employed by the group on 31 December is:			8,914	4,729
20. Net fair value gains on financial assets 2022 2021 During the year, the following gains were recognised in profit or loss: R'000 R'000 Gains recognised in the statement of profit or loss: 68,442 93,242 Gains recognised in other comprehensive income: 68,442 93,242 Gains recognised in other comprehensive income: 68,442 93,242 Net fair value gains on financial assets 618,442 93,242 Gains recognised in other comprehensive income: 1,286,721 2,957,789 Net fair value gains on financial assets (1,286,721) 2,957,789 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 23,225 Current and past service costs: defined benefit medical plan (refer note 10.2) 13,716 13,979 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 289,735 Current and past service costs: group life assurance scheme (refer note 10.4) 5,982 3,041 4,331,666 4,111,317 Personnel costs 4,337,738 4,109,177 Non-accumulative leave accrual 5,674 5,708 4,411,317 The number of persons employed by the group on 31 December is:				
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2022 2021 During the year, the following gains were recognised in profit or loss: R000 Gains recognised in the statement of profit or loss: 68,442 93,242 68,442 Gains recognised in other comprehensive income: 68,442 Net fair value gains on financial assets 68,442 Gains recognised in other comprehensive income: 68,442 Net fair value gains on financial assets (1,286,721) 2.957,789 2022 2021 R'000 R'000 R'000 Salaries and wages 3,961,650 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 Current and past service costs: defined contribution provident plan (refer note 10.4) 5,986 4,337,738 4,109,177 Non-accumulative leave accrual (24,072) Personnel costs 4,337,738 August 5,674 5,674 5,708 Joint appointments - Full-time 5,674 Joint appointments - Full-time (more than 15 hours per week) 7				
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Gains recognised in the statement of profit or loss: Net fair value gains on financial assets 68,442 93,242 Gains recognised in other comprehensive income: (1,286,721) 2,957,789 Net fair value gains on financial assets (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (2022 2021 R000 R000 R000 Salaries and wages 3,961,650 3,781,307 23,255 Current and past service costs: defined benefit pension plan (refer note 10.1) 25,341 23,255 Current and past service costs: defined contribution provident plan (refer note 10.3) 306,977 289,735 Current and past service costs: group life assurance scheme (refer note 10.4) 5,982 3,041 4,313,666 4,111,317 A,313,666 4,111,317 Personnel costs 4,337,738 4,109,177 Non-accumulative leave accrual 5,674 5,708 Full-tim		During the year, the following gains were recognised in profit or loss and other comprehensive income:		
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Gains recognised in other comprehensive income: Net fair value gains on financial assets(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(1,286,721)2,957,789(20222021(2000)R'000Salaries and wages3,961,650(21,761)25,341(22,531)22,557Current and past service costs: defined benefit medical plan (refer note 10.1)(24,71)25,341(23,773)4,109,177(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)2,140(24,072)5,674(24,072)5,674(24,073)5,674(24,074) <t< td=""><td></td><td>Net fair value gains on financial assets</td><td>68,442</td><td>93,242</td></t<>		Net fair value gains on financial assets	68,442	93,242
Net fair value gains on financial assets (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (1,286,721) 2,957,789 (21,01) 25,341 23,255 (21,01) 13,716 13,979 (21,02) 13,716 13,979 (21,02) 2,987,758 3,041 (24,072) 2,140 4,313,666 (4,111,317 (24,072) 2,140 (24,072) 2,140 4,313			68,442	93,242
(1,286,721)2,957,7892022202121. Personnel costsR'000Salaries and wages $3,961,650$ Current and past service costs: defined benefit pension plan (refer note 10.1) $25,341$ Current and past service costs: defined benefit medical plan (refer note 10.2) $13,716$ Current and past service costs: defined contribution provident plan (refer note 10.3) $306,977$ Current and past service costs: defined contribution provident plan (refer note 10.4) $5,982$ Ourrent and past service costs: group life assurance scheme (refer note 10.4) $5,982$ Personnel costs $4,313,666$ $4,111,317$ Personnel costs $4,337,738$ $4,109,177$ Non-accumulative leave accrual $2,740$ $2,140$ The number of persons employed by the group on 31 December is: Full-time $5,674$ $5,708$ Part-time (more than 15 hours per week) 546 498 Joint appointments - Full-time 546 498 Joint appointments - Part-time (more than 15 hours per week) 7 8				
21. Personnel costs 2022 R'000 2021 R'000Salaries and wages $3,961,650$ $25,341$ $23,2553,781,30725,34123,255Current and past service costs: defined benefit medical plan (refer note 10.1)Current and past service costs: defined contribution provident plan (refer note 10.3)Current and past service costs: group life assurance scheme (refer note 10.4)3,7165,9823,041Personnel costs4,313,6664,111,3174,109,177(24,072)2,140Personnel costs4,337,738(24,072)2,1404,111,317The number of persons employed by the group on 31 December is:Full-timeJoint appointments - Full-time5,6745464175,708417434Joint appointments - Part-time (more than 15 hours per week)Joint appointments - Part-time (more than 15 hours per week)78$		Net fair value gains on financial assets		
21. Personnel costsR'000R'000Salaries and wages3,961,6503,781,307Current and past service costs: defined benefit pension plan (refer note 10.1)25,34123,255Current service costs: defined benefit medical plan (refer note 10.2)13,71613,979Current and past service costs: defined contribution provident plan (refer note 10.3)306,977289,735Current and past service costs: group life assurance scheme (refer note 10.4)5,9823,041Personnel costs4,313,6664,111,317Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time (more than 15 hours per week)5,6745,708Part-time (more than 15 hours per week)417434Joint appointments - Part-time (more than 15 hours per week)78			(1,286,721)	2,957,789
Salaries and wages $3,961,650$ $3,781,307$ Current and past service costs: defined benefit pension plan (refer note 10.1) $25,341$ $23,255$ Current service costs: defined benefit medical plan (refer note 10.2) $13,716$ $13,979$ Current and past service costs: defined contribution provident plan (refer note 10.3) $306,977$ $289,735$ Current and past service costs: group life assurance scheme (refer note 10.4) $5,982$ $3,041$ Personnel costs $4,313,666$ $4,111,317$ Non-accumulative leave accrual $(24,072)$ $2,140$ $4,313,666$ $4,111,317$ The number of persons employed by the group on 31 December is: Full-time $5,674$ $5,708$ Part-time (more than 15 hours per week) Joint appointments - Full-time 546 498 Joint appointments - Part-time (more than 15 hours per week) 7 8			2022	2021
Current and past service costs: defined benefit pension plan (refer note 10.1)25,34123,255Current service costs: defined benefit medical plan (refer note 10.2)13,71613,979Current and past service costs: defined contribution provident plan (refer note 10.3)306,977289,735Current and past service costs: group life assurance scheme (refer note 10.4)5,9823,0414,313,6664,111,317Personnel costs4,337,7384,109,177Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time Joint appointments - Full-time5,6745,7089art-time (more than 15 hours per week) Joint appointments - Part-time (more than 15 hours per week)546498417434417434Joint appointments - Part-time (more than 15 hours per week)78	21.	Personnel costs	R'000	R'000
Current and past service costs: defined benefit pension plan (refer note 10.1)25,34123,255Current service costs: defined benefit medical plan (refer note 10.2)13,71613,979Current and past service costs: defined contribution provident plan (refer note 10.3)306,977289,735Current and past service costs: group life assurance scheme (refer note 10.4)5,9823,0414,313,6664,111,317Personnel costs4,337,7384,109,177Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time Joint appointments - Full-time5,6745,7089art-time (more than 15 hours per week) Joint appointments - Part-time (more than 15 hours per week)546498417434417434Joint appointments - Part-time (more than 15 hours per week)78				
Current service costs: defined benefit medical plan (refer note 10.2)13,71613,979Current and past service costs: defined contribution provident plan (refer note 10.3)306,977289,735Current and past service costs: group life assurance scheme (refer note 10.4)5,9823,0414,313,6664,111,317Personnel costs4,337,7384,109,177Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time5,6745,708Part-time (more than 15 hours per week)546498Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78		5	, ,	
Current and past service costs: defined contribution provident plan (refer note 10.3)306,977289,735Current and past service costs: group life assurance scheme (refer note 10.4)5,9823,041 4,313,6664,111,317 Personnel costs4,337,7384,109,177Non-accumulative leave accrual(24,072)2,140 4,313,6664,111,317 The number of persons employed by the group on 31 December is:5,6745,708Full-time5,6745,708Part-time (more than 15 hours per week)546498Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78				
Current and past service costs: group life assurance scheme (refer note 10.4)5,9823,0414,313,6664,111,317Personnel costs4,337,7384,109,177Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time5,6745,708Part-time (more than 15 hours per week) Joint appointments - Full-time546498417434417434Joint appointments - Part-time (more than 15 hours per week)78				
4,313,666 4,111,317 Personnel costs 4,337,738 4,109,177 Non-accumulative leave accrual (24,072) 2,140 4,313,666 4,111,317 The number of persons employed by the group on 31 December is: 5,674 5,708 Full-time 5,674 5,708 Part-time (more than 15 hours per week) 546 498 Joint appointments - Full-time 417 434 Joint appointments - Part-time (more than 15 hours per week) 7 8				
Personnel costs4,337,7384,109,177Non-accumulative leave accrual(24,072)2,140(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-timeFull-time5,6745,708Part-time (more than 15 hours per week)546498Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78		Current and past service costs: group life assurance scheme (refer note 10.4)		
Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time5,6745,708Part-time (more than 15 hours per week) Joint appointments - Full-time546498Joint appointments - Full-time Joint appointments - Part-time (more than 15 hours per week)78			4,313,666	4,111,317
Non-accumulative leave accrual(24,072)2,1404,313,6664,111,317The number of persons employed by the group on 31 December is: Full-time5,6745,708Part-time (more than 15 hours per week) Joint appointments - Full-time546498Joint appointments - Full-time Joint appointments - Part-time (more than 15 hours per week)78		Percented costs	1 227 729	4 100 177
Image: definition of persons employed by the group on 31 December is:Full-time5,674Full-time (more than 15 hours per week)546Joint appointments - Full-time417Joint appointments - Part-time (more than 15 hours per week)78				
The number of persons employed by the group on 31 December is:5,6745,708Full-time5,6745,708Part-time (more than 15 hours per week)546498Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78			<u>_</u>	
Full-time5,6745,708Part-time (more than 15 hours per week)546498Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78			4,515,000	7,111,317
Part-time (more than 15 hours per week)546498Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78		The number of persons employed by the group on 31 December is:		
Joint appointments - Full-time417434Joint appointments - Part-time (more than 15 hours per week)78		Full-time	5,674	5,708
Joint appointments - Part-time (more than 15 hours per week) 7 8		Part-time (more than 15 hours per week)	546	498
			417	434
6,644 6,648		Joint appointments - Part-time (more than 15 hours per week)		-
			6,644	6,648

22.	Other operating expenses	2022 R'000	2021 R'000
	The following items have been included in other operating expenses:		
	Auditor's remuneration - as auditor	6,451	5,619
	- as other	5,391	5,977
	Consultants	164,983	131,780
	Consumables	132,482	131,316
	Foreign exchange differences	1,541	1,034
	Inventory expensed during the year	107,173	80,632
	IT related expenditure	214,987	210,894
	Library material and online educational resources	116,854	112,634
	Municipal charges - rates, taxes, diesel, water and electricity	308,803	270,544
	Repairs and maintenance	231,697	201,351
	Travel and subsistence	181,683	45,309
23.	Taxation	2022	2021
		R'000	R'000
	The University is exempt from income tax in terms of section 10(1)(cA)(i) of the Income Tax Act. However, some of the subsidiaries of the University are not exempt from income tax.		
	SA normal tax		
	Current tax	-	(3)
	Deferred tax	(46)	-
		(46)	(3)
	Tax reconciliation		
	Current year temporary differences	(46)	147
	Underprovision of deferred tax in prior years	-	(147)

SA normal tax		
Current tax	-	(3)
Deferred tax	(46)	-
	(46)	(3)
Tax reconciliation		
Current year temporary differences	(46)	147
Underprovision of deferred tax in prior years	-	(147)
Underprovision of current tax in prior years	-	(3)
Income tax for the year	(46)	(3)

TuksSport (Pty) Ltd and its subsidiary TS Soccer (Pty) Ltd, have tax losses of R64.9m (2021: R68.0m). No deferred tax assets have been raised for the assessed tax losses. TuksSport (Pty) Ltd is a wholly owned subsidiary of the University of Pretoria.

Tax (paid)/refunded:		
Balance at beginning of the year	198	403
Current tax for the year	(46)	-
Balance at the end of the year	(49)	(198)
Tax paid for the year	103	205

24. Contingent liabilities

Legal actions

Management is not aware of any ongoing significant legal matters.

25. Contractual obligations in respect of expenses	2022 R'000	2021 R'000
The following commitments existed on 31 December in respect of contracts concluded and orders placed:		
Capital expenditure, including movable assets	188,503	116,114
Operating expenditure	113,224	50,932
	301,727	167,046

26.	Cash generated from operations	2022 R'000	2021 R'000
	Reconciliation of surplus to cash generated from operations:		
	Surplus before tax	857,246	914,878
	Adjustments for:		
	Depreciation	237,349	232,328
	Amortisation	7,730	8,299
	Net interest income on defined benefit/contribution plans	(100,506)	(57,868)
	Current service cost on defined benefit/contribution plans	351,677	329,577
	Past service cost on defined benefit/contribution plans	339	433
	Contributions on defined benefit/contribution plans	(326,153)	(309,433)
	Benefits paid on group life liability	(5,862)	(3,049)
	Loss on disposal of property, plant and equipment	(500)	2,616
	Share of loss of associate	(455)	(317)
	Dividend income	(219,295)	(192,818)
	Interest income	(222,375)	(149,417)
	Finance expense	272	206
	Net fair value adjustment on investments through profit and loss	(68,442)	(93,242)
	Changes in working capital	46,907	295,485
	(Increase) in trade and other receivables	(52,335)	(73,988)
	Decrease in non-current loans and receivables	3,320	3,928
	Decrease in inventories	4,364	1,647
	(Decrease)/increase in trade and other payables and other liabilities	(162,000)	31,451
	Increase in student credits and deposits	27,044	51,580
	Increase in agency funds	226,514	280,867
	Cash generated from operations	557,932	977,678

27. Related parties

27.1 Key management personnel

The following are considered to be related parties to the University:

- University Council members; and

- Management, comprising the Executive, Deans of faculties, Directors of professional service departments and Directors of subsidiaries.

Compensation paid to key management and members of Council:

	Members of Council	Management	2022	2021
	R'000	R'000	R'000	R'000
Salaries and other short-term employee benefits	756	118,068	118,824	97,979
Post-employment benefits	-	10,724	10,724	8,814

27.2 Subsidiaries and associates

Subsidiaries

The University of Pretoria controls and owns 100% of the shares of the following companies:

- Enterprises University of Pretoria (Pty) Ltd
- Marti TB Diagnostics (Pty) Ltd
- Stratoscience (Pty) Ltd (dormant)
- TuksSport (Pty) Ltd
- University of Pretoria Clinical Services (Pty) Ltd
- Venture Laboratories (Pty) Ltd (dormant)

TuksSport (Pty) Ltd owns 100% of the shares of the following companies:

- Play 4 Sport (Pty) Ltd (dormant)
- TS Soccer (Pty) Ltd

Associates

The University of Pretoria controls and owns 27.22% of the shares of Insiava (Pty) Ltd.

The University of Pretoria owned 50% of the shares of SERA (Pty) Ltd which was liquidated in March 2022. The University had significant influence but not control over the SERA (Pty) Ltd.

Enterprises University of Pretoria (Pty) Ltd owns the following shareholding:

- 30% in Bookmark at UP (Pty) Ltd

Trusts and non-profit entities

The University of Pretoria is the sole beneficiary of the following Trusts:

- Arts Centre Foundation Trust
- Eduardo Villa Trust
- Enterprises @ University of Pretoria Trust (dormant)
- Gauteng Software Incubator Trust (dormant)

The University of Pretoria controls the following Non-Profit entities:

- The Gordon Institute of Business Science NPC (dormant)
- TuksSport Study Centre NPC
- TuksNovation NPC

The University of Pretoria controls 100% of the University of Pretoria Foundation - Delaware (USA).

27.3 Post-employment contribution and benefit plans

University of Pretoria Pension Fund University of Pretoria Post-employment Medical Benefit Fund University of Pretoria Provident Fund FundsAtWork Umbrella Provident Fund University of Pretoria Post Retirement Group Life Assurance Fund

27.4 Transactions with related parties

28.

Insiava (Pty) Ltd - Unlisted

No transactions other than loans, lease of buildings, administration fees and management contracts have taken place between the University of Pretoria and its subsidiaries. All intergroup transactions were eliminated on consolidation.

		2022	2021
	The following transactions were carried out with related parties:	R'000	R'000
	Income received from associates:		10
	Insiava (Pty) Ltd	-	13
	Employer contributions paid to:		
	University of Pretoria Provident Fund	170,867	159,888
	University of Pretoria Pension Fund	19,176	20,372
	Amounts receivable at year end:		
	Associates		
	Insiava (Pty) Ltd	725	725
	Loan accounts:		
	Associates		
	Insiava (Pty) Ltd	15,915	15,915
	SERA (Pty) Ltd	-	18,116
	Provision for impairment:		
	Associates		
	Insiava (Pty) Ltd	15,915	15,915
	SERA (Pty) Ltd	-	18,116
	The loans are unsecured, bear no interest and do not have defined repayment terms.		
3.	Investment in associate companies		
		2022	2021
		R	R
	Shares at cost		
	SERA (Pty) Ltd - Unlisted	-	50
	Bookmark at UP (Pty) Ltd - Unlisted	429	429

 Share of accumulated profit/(loss) since acquisition
 (50)

 SERA (Pty) Ltd - Unlisted
 1,040,169
 1,494,959

 Bookmark at UP (Pty) Ltd - Unlisted
 1,040,169
 1,494,909

5,000,750

5,000,750

The group's share of losses in Insiava (Pty) Ltd exceeds its interest in the associate (including unsecured receivables). The group does not recognise further losses.

	2022 Percentage voting rights	2021 Percentage voting rights	2022 No of shares held	2021 No of shares held
SERA (Pty) Ltd - Unlisted	-	50%	-	50
Bookmark at UP (Pty) Ltd - Unlisted	30%	30%	429	429
Insiava (Pty) Ltd - Unlisted	27%	27%	100 915	100 915

The University's interests in Bookmark at UP (Pty) Ltd and Insiava (Pty) Ltd, is accounted for using the equity method. The University had significant influence but not control over SERA (Pty) Ltd which was liquidated during 2022.

The aggregate assets, liabilities and results of operations of associate companies for the financial year ended

31 December 2022 are summarised as follows:

	Insiava (Pty) Ltd* R'000	SERA (Pty) Ltd** R'000	Bookmark at UP (Pty) Ltd*** R'000	Total 2022 R'000
Non-current assets	375	-	232	607
Current assets	1,558	-	2,159	3,717
Non-current liabilities	(22,803)	-	-	(22,803)
Current liabilities	(1,709)	-	(805)	(2,514)
Revenue	1,654	-	3,450	5,104
(Loss) after tax	(1,228)	-	(455)	(1,683)

The aggregate assets, liabilities and results of operations of associate companies for the financial year ended 31 December 2021 are summarised as follows:

	Insiava (Pty) Ltd* R'000	SERA (Pty) Ltd** R'000	Bookmark at UP (Pty) Ltd*** R'000	Total 2021 R'000
Non-current assets	617	-	503	1,120
Current assets	2,591	2,168	2,426	7,185
Non-current liabilities	(22,803)	-	(673)	(23,476)
Current liabilities	(1,755)	(18,168)	-	(19,923)
Revenue	2,239	-	2,197	4,436
(Loss) after tax	(445)	-	(317)	(762)

*The financial year-end of Insiava (Pty) Ltd is 31 December. Results indicated above are based on audited financial statements for the year ended 31 December 2022.

**The financial year-end of SERA (Pty) Ltd is 31 March. Results for 2021 indicated above are based on unaudited financial statements for the year ended 31 March 2021. The entity was liquidated on 31 March 2022

***The financial year-end of Bookmark (Pty) Ltd is 30 September. Results indicated above are based on audited financial statements for the year ended 30 September 2022.

29. Financial assets and financial liabilities by category

	Financial assets at amortised cost	Financial assets at fair value through P&L	Financial assets at fair value through OCI	Total 2022
31 December 2022	R'000	R'000	R'000	R'000
Assets as per statement of financial position:				
Investments (refer note 4) ^a	-	1,402,413	13,796,266	15,198,679
Non-current loans and receivables (refer note 6) b	8,641	-	-	8,641
Trade and other receivables (refer note 8) ^c	636,850	-	-	636,850
Cash and cash equivalents (refer note 9) c	2,999,937	-	-	2,999,937
	3,645,428	1,402,413	13,796,266	18,844,107
		I	Financial liabilities at amortised cost	Total 2022
			R'000	R'000
Liabilities as per statement of financial position:				
Lease liabilities (refer to note 11) ^b			1,297	1,297
Trade payables, accruals and other liabilities (refer note 12) $^{\circ}$			535,378	535,378
Student credits and deposits (refer to note 15) ^c			430,213	430,213

604,266

1,571,154

604,266

1,571,154

Student credits and deposits (refer to note 15)

Agency funds (refer to note 16)^b

Level in fair value hierarchy:

a - Levels 1, 2 and 3

b - Level 3

c - Level 1

	31 December 2021	Financial assets at amortised cost R'000	Financial assets at fair value through P&L R'000	Financial assets at fair value through OCI R'000	Total 2021 R'000
	Assets as per statement of financial position:				
	Investments (refer note 4) ^a	2,600	1,356,549	14,377,329	15,736,478
	Non-current loans and receivables (refer note 6) ^b	11,961	-	-	11,961
	Trade and other receivables (refer note 8) ^c	584,515	-	-	584,515
	Cash and cash equivalents (refer note 9) $^{\circ}$	3,152,918			3,152,918
		3,751,994	1,356,549	14,377,329	19,485,872
				Financial liabilities	Total
				at amortised cost	2021
				R'000	R'000
	Liabilities as per statement of financial position:				
	Lease liabilities (refer to note 11) ^b			1,700	1,700
	Trade payables, accruals and other liabilities (refer note 12) ^c			563,131	563,131
	Student credits and deposits (refer to note 15) ^c			403,169	403,169
	Agency funds (refer to note 16) b			377,752	377,752
	5 5 (,			1,345,752	1,345,752
	Level in fair value hierarchy a - Levels 1, 2 and 3 b - Level 3 c - Level 1				
30.	Credit quality of financial assets				
				2022	2021
	Cash at bank and short-term deposits			R'000	R'000
	Fitch Ratings or equivalent (national short term):				
	F1+			2,998,680	3,133,077
	BBB+			1,257	19,841
	Total cash and cash equivalents (refer note 9)			2,999,937	3,152,918
				2022	2021
				R'000	R'000
	Listed bonds and other			11.000	1,000
	Government			33,544	31,473
	AAA (Government guaranteed)			867	803
	AAA (Non-Government)			53.742	42,208
	AA			264,803	187,655
	A			470,631	438,864
	BBB			98,148	114,515
	BB			116,131	182,083
	B			140,321	102,737
	ссс			9,250	12,912
	D			5,080	7,230
	Total bonds and other (refer note 4.2)			1,192,517	1,120,480
	·····			, -=,	, ==,

Bonds are placed with Ninety One, Coronation Fund Managers and Futuregrowth Asset Management, and consist of South African government, parastatal, corporate and inflation-linked bonds, as well as infrastructure and development bonds.

31. Risk management

The group is exposed to a variety of financial risks: market risk (including foreign currency risk, interest rate risk and price risk), capital risk, credit risk and liquidity risk.

A Risk Management Committee, comprising certain members of the Executive Committee, Deans and Directors identifies, evaluates and co-ordinates the management of strategic risks faced by the University. Risk management processes are reviewed regularly for continuing relevance and effectiveness. The Risk Management Committee reports to the Executive Committee and to the Audit, IT and Risk Committee of Council. A report on the risk management process that is being followed, as well as a summary of the risk register, are presented to the Audit, IT and Risk Committee, Standing Committee of Council and to the Council of the University on a regular basis.

The group varies its investment philosophy based on longer term investment and liability requirements and the risk profile. To this end two portfolios have been established, namely:

- Long Term Capital (LTC) Portfolio – Long term investing (at least 5 years) where the investment objective and risk constraint is set relative to consumer price inflation.

- Money Market Portfolio – Short-term investing (2 years and less) where the investment objective and risk constraint is set relative to short term interest rates and a high degree of capital security.

31.1 Financial risk factors

A. Market risk

(i) Foreign currency risk

The group has limited foreign exchange exposure in respect of normal operating activities. Foreign investments and foreign bank balances are subject to exchange rate fluctuations. The group manages foreign exchange risk through the Investment Committee of Council which monitors the investment climate and economic factors that affect the investment strategy and which monitors the investment results of the fund managers of the various investment portfolios. The carrying amount of financial instruments that are exposed to foreign currency risk are as follows:

	2022	2021
	R'000	R'000
Foreign securities (USD)	8,397,453	9,262,638
Foreign securities (EURO)	236,138	290,149
	8,633,591	9,552,787
Foreign currency sensitivity analysis	2022	2021
	R'000	R'000
	± 10%	± 10%
Foreign investments (USD)	839,745	926,264
Foreign investments (EURO)	23,614	29,015
Total	863,359	955,279

At 31 December 2022, if the USD and the EURO had strengthened by 10% against the Rand with all other variables held constant, the surplus for the year would have been R863.4m (2021: R955.3m) higher, as a result of a Rand increase in the fair value of USD and EURO denominated investments. If the USD and EURO had weakened by 10% against the Rand with all other variables held constant, the surplus for the year would have been R863.4m (2021: R955.3m) lower, as a result of a Rand decrease in the fair value of USD and EURO denominated investments. The 10% variation in the exchange rate is based on the average forward rate for 12 months in respect of the underlying currencies.

(ii) Price risk

The group is exposed to equity securities price risk because of investments held by the group and classified as investments at fair value through other comprehensive income. The group is not directly exposed to commodity price risk. To manage its price risk arising from investments in equity securities, the group diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the Investment Committee of Council.

Price sensitivity analysis

Listed equities

At 31 December 2022, if the FTSE/JSE CAPI index increased/decreased by 10% with all other variables held constant and all the group's equity instruments moved according to the historical correlation with the index, the other comprehensive income for the year would have been R1,323.1m (2021: R1,400.1m) higher/lower. Due to the unpredictability of equity market returns, a general indicative percentage of 10% is used to highlight the changes in market value on equity investments.

(iii) Interest rate risk

The group has significant interest-bearing assets but no significant interest-bearing liabilities. The group's income and operating cash flows are substantially independent of changes in market interest rates. Interest rate risk is mitigated by means of a diversified investment portfolio comprising of various different asset classes and investment managers.

Interest rate sensitivity analysis

Cash, bank and cash equivalents (variable rate financial assets)

At 31 December 2022, if the interest rate had been 50 basis points higher/lower, the surplus would have been R15.0m (2021: R15.8m) higher/lower. The increase/decrease of 50 basis points in the interest rate is based on the assumption that interest rates on average may increase/decrease in increments of 50 basis points at a time.

B. Credit risk

Potential concentrations of credit risk consist mainly of short-term cash, cash equivalent investments, student loans, trade receivables, other receivables and investments carried at amortised cost. The maximum exposure to credit risk is represented by the carrying amount of all financial assets subject to credit risk.

(i) Loans and receivables

Receivables comprise outstanding student fees, student loans and various customers, dispersed across different industries and geographical areas. The group is exposed to credit risk arising from student receivables related to outstanding fees. This risk is mitigated by requiring students to pay an initial instalment in respect of tuition and accommodation fees at registration, the regular monitoring of outstanding fees and the institution of debt collection action in cases of long outstanding amounts. In addition, students with outstanding balances from previous years of study are only permitted to renew their registration after either the settling of the outstanding amount or the conclusion of a formal payment arrangement.

The University assists a limited number of financially needy students with loans. Although this represents a credit risk, the risk is mitigated by means of two guarantees required per student loan agreement. Credit valuations are performed on the financial condition of customers other than students.

2022	2021
R'000	R'000
± 10%	± 10%

1,323,147	1,400,071

2022	2021
R'000	R'000
± 50 basis	± 50 basis
points	points
15,000	15,765

The group considers the probability of default upon initial recognition of an asset and whether there has been a significant increase in credit risk on an ongoing basis throughout each reporting period. To assess whether there is a significant increase in credit risk, the group compares the risk of a default occurring on the asset as at the reporting date with the risk of default as at the date of initial recognition. It considers available reasonable and supportive forwarding-looking information such as actual or expected significant adverse changes in the sector, financial or economic conditions that are expected to cause a significant change to the debtor's ability to meet its obligations and macroeconomic information (interest rates and unemployment data).

A default on a financial asset is when the debtor fails to make contractual payments within 30 days of when they fall due.

A significant increase in credit risk is presumed if a student is overdue in making contractual payments and has completed their studies or has deregistered.

For detail regarding the nature of credit risk and expected credit losses of loans and receivables, refer to notes 6 and 8.

(ii) Investments and cash and cash equivalents

The group places long-term and short-term investments with reputable financial institutions. A multi-manager approach is followed for the management of investments in order to limit investment risk. Funds are invested with twenty-five divergent portfolio managers (thirteen local and twelve foreign), with specialist mandates developed to contain risk within set parameters. In order to hedge investment funds against fluctuations, the University invests some of the available funds abroad.

The group is also exposed to credit risk in relation to debt investments that are measured at fair value through profit or loss. The group's investments in debt instruments are considered to be low risk investments. The credit ratings of the investments are monitored for credit deterioration. Refer to note 30 for detail on the credit quality of financial assets. Other instruments are considered to be low credit risk where they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term. The maximum exposure at the end of the reporting period is the carrying amount of these investments, R1,402.4m (2021: R1,120.5m).

Cash and cash equivalents, investments at fair value through profit or loss and investments carried at amortised cost are subject to the impairment requirements of IFRS 9. The identified impairment loss was immaterial as these are held at reputable financial institutions with a low probability of default. No impairment losses have been recognised for these assets.

C. Liquidity risk

The group has minimised liquidity risk through substantial balances of cash and cash equivalents. The group manages a cash budget that is continually updated and reported to the Investment Committee of Council.

Cash requirements are based on a working capital budget, which in turn is based on a breakeven Council approved annual budget. Spending within the University structure is controlled through fund accounting and commitment control, which limits overall spending to the budgeted figures as approved by Council.

Management monitors rolling forecasts of cash and cash equivalents on the basis of expected cash inflows and outflows, while considering the level of liquid assets available to meet these requirements. A portfolio of long-term and short-term investments are strategically managed to ensure accessibility to cash funding.

The table below analyses the group's financial liabilities into relevant maturity groupings based on the remaining period at the statement of financial position date to the contractual maturity date. The amounts disclosed in the table are the undiscounted cash flows. Balances due within a year equal their carrying amount as the impact of discounting is not significant.

At 31 December 2022

	Less than 1 year R'000	Between 1-3 years R'000	Between 3-5 years R'000	More than 5 years R'000
Agency funds	604,266	-	-	-
Lease liabilities	615	777	-	-
Student credits and deposits	430,213	-	-	-
Trade payables, accruals and other liabilities	535,378	-	-	-
	1,570,472	777	-	-
At 31 December 2021				
	Less than	Between	Between	More than
	1 year	1-3 years	3-5 years	5 years
	R'000	R'000	R'000	R'000
Agency funds	377,752	-	-	-
Lease liabilities	1,482	315	-	-
Student credits and deposits	403,169	-	-	-
Trade payables, accruals and other liabilities	563,131	-	-	-
	1,345,534	315	-	-

D. Capital risk management

The group's objectives when managing capital (which include all items of capital and funds as presented on the statement of financial position) are to safeguard the ability of the University of Pretoria and its subsidiaries to continue as a going concern and to maintain an optimal structure to reduce the cost of capital.

In order to maintain the capital structure, the group has ensured a sound financial position by limiting exposure to debt and increasing investment and cash balances. This objective is met by a well planned budget process each year in which the critical strategic objectives of the group is addressed.

The capital of the University comprises both restricted funds designated for specific purposes and unrestricted funds, being funds that can be employed by Council at its discretion.

The University has a satisfactory ratio of reserves to assets, however it must be remembered that much of the asset base is held in designated investments and in property, which has restricted alienability.

The group's policy is to apply conservative financing. Internal loans are used for managerial purposes at a rate appropriate to the inherent risk. Debt is avoided but, where utilised, the policy is to settle in as short a period as possible.

32. Remuneration of Executive Management

The remuneration of Executive Management is approved by the Human Resources Committee of Council. Members of Council are given access to this information by the Chairperson of the Remuneration Committee on request. Council delegated the approval of the information to the Chairperson of Council before submission to the Department of Higher Education and Training.

The following information on amounts actually accrued during the financial year is supplied in order to comply with the Higher Education Act (101 of 1997, as amended) and the Regulations for Annual Reporting by Higher Education Institutions.

Name	Position	Nature	2022 R'000	2021 R'000
Prof T Kupe	Vice-Chancellor and Principal	Basic Salary Employment Benefits Other	3,878 667 26	3,697 579 22
Prof NTF Duncan	Vice-Principal: Academic (January to August 2022)	Basic Salary Employment Benefits Other	1,990 259 13	2,478 327 12
Prof LA Feris	Vice-Principal: Academic (July to December 2022)	Basic Salary Employment Benefits Other	833 118 6	-
Prof A Stroh	Vice-Principal: Institutional Planning, Research and Innovation and Postgraduate Education	Basic Salary Employment Benefits Other	-	2,775 654 105
Prof BTJ Maharaj	Vice-Principal: Institutional Planning, Research and Innovation and Postgraduate Education	Basic Salary Employment Benefits* Other	2,871 875 14	633 104 126
Prof T Mosia	Vice-Principal: Student Life	Basic Salary Employment Benefits Other	2,829 485 17	2,697 418 12
Mr S Mthiyane	Chief Operating Officer	Basic Salary Employment Benefits Other	2,960 554 17	2,822 483 12
Prof C Koornhof	Executive Director: Finance and Business Initiatives	Basic Salary Employment Benefits Other	3,083 483 17	2,939 412 12
Prof CMA Nicholson	Registrar	Basic Salary Employment Benefits Other	2,846 560 59	1,904 336 12
			25,460	23,571

* Includes project related payments from Enterprises University of Pretoria (Pty) Ltd

33. Remuneration of members of Council

3. Remuneration of members of Council	2022 R'000	2021 R'000
DM Behr	-	18
AD Botha	-	16
A Chowan	44	14
KP Diale	-	5
K Dlamini	89	72
DJ Fourie	40	18
HH Koster	22	9
BJ Kruger	84	59
P Langeni	13	5
N Lesela	86	60
MW Madi	40	22
DE Magugumela	-	9
NT Mtoba	-	12
PA Nel	-	9
AJ Pienaar	-	14
V Qinga	40	27
MMT Ramano	35	22
CM Read	40	14
FD Swart	35	36
AE Swiegers	42	31
S Taylor	50	19
ST Tsengiwe	44	22
RJ Van Der Eyden	22	9
JHP Van Der Merwe	30	29
	756	551

Council members are remunerated on a per-meeting basis.

34. Events after the reporting period

There have been no subsequent events after the year end date which require disclosure or amendment to the annual financial statements as at December 2022.