



Central University of
Technology, Free State

PORTFOLIO COMMITTEE OF HIGHER EDUCATION, SCIENCE AND INNOVATION

Oversight visit
Executive Management

Thinking Beyond



CUT READINESS FOR THE 2022 ACADEMIC YEAR

52% of students will return to campuses for face-to-face classes under the adjusted level 1 of the lockdown (those who need labs and practicals as well as first-year students for one module).

According to the 2022 CUT academic calendar, the classes for the 1st semester will commence on 14 Feb 2022.

Announcement on additional students who may be requested to return for face-to-face classes will be released on 16 Feb 2022, latest.

The students mentioned above will start with online teaching on 14 Feb 2022, and they will only physically return to CUT's campuses on 1 Mar 2022 in order to allow them enough time to arrange accommodation.

2022 academic year set for completion at end of 2022.

Outcomes of the disciplinary hearing process of the former Vice-Chancellor

- The Disciplinary hearing of the former Vice-Chancellor was not concluded due to the negotiations around a mutual separation agreement, which was accepted by Council.
- An amicable mutual separation between CUT and Professor Henk De Jager was approved, and he departed CUT at the end of Sept 2021.
- The matter pertaining to the Independent Review Report compiled by Prof. Petersen as well as the mutual separation matter of Prof. de Jager was discussed at the following committee structures, Institutional Forum (IF), Senate and the Students' Representative Council (SRC) for discussion at these meetings that had been concluded in the period 05 to 10 Nov 2021.
- A detailed submission on the VC's accomplishments during his tenure was shared with all the statutory structures prior to the meeting, with some highlights extracted from Prof. Petersen's report that was presented by the Senior Director: HR at the various committee meetings.
- The matter was then officially concluded.



PROGRESS REPORT ON REGISTRATION AND ENROLMENT OF STUDENTS IN 2022

1 of 4

REGISTRATION DATES: ALL FIRST-YEAR AND RETURNING POSTGRADUATE STUDENTS

DATE	FACULTY
26 January	Faculty of Humanities
27 January	Faculty of Engineering, Built Environment and Information Technology
28 January	Faculty of Health and Environmental Sciences
31 January	Faculty of Management Sciences

REGISTRATION DATES: SENIOR STUDENTS

DATE	FACULTY
03 February	Faculty of Humanities
04 February	Faculty of Engineering, Built Environment and Information Technology
07 February	Faculty of Health and Environmental Sciences
08 February	Faculty of Management Sciences

- CUT opened the 2022 applications cycle on 15 Jul 2021. Registration information was extensively shared on various media platforms.
- No late “walk-in” applications were accepted.
- End of registration for first semester and year subjects is 08 Feb 2022. This includes all first-year students, all faculties, and all campuses.



PROGRESS REPORT ON REGISTRATION AND ENROLMENT OF STUDENTS IN 2022

2 of 4

Overview of the process:
challenges, successes,
future recommendations.

- The dependency on manual selection processes still hinders the efficiency of the processes. These challenges are addressed through an automation process that the university is working towards.
- The late release of the NSC results impacted on prompt feedback to applicants. Data verification still indicates some gaps.
- The campus was erroneously open to all prospective students on Monday, 24 Jan 2022. This resulted in some bottlenecks and concerns over possible risk of non-compliance to COVID-19 protocols. No incidents were further noted. The process is still underway.



PROGRESS REPORT ON REGISTRATION AND ENROLMENT OF STUDENTS IN 2022

3 of 4

Academic year 2021–year end examinations in preparation for the returning students' registration process.

- The main examination commenced on 24 and concluded on 10 Dec 2021. All main examination marks and continuous assessments were scheduled to be concluded on 10 Dec 2021.
- All 2021 assessments had been finalised on 31 Jan 2022.
- Re-examinations were scheduled and written between the dates 17-21 Jan 2022; all results were published on 28 Jan 2022.
- Exceptions were noted in the Faculty of Humanities.
- The submission of marks and finalisation of results improved. The faculty staff did due diligence and managed to submit correct marks and signed off their control sheets as per process. The results ratification process was done, and results were published on 28 Jan 2022 at 08:00.
- All results were released, and we did not affect the withholding of results.

This preparation was planned in view of the registration dates and so that the availability of the results for returning students informed a seamless registration process in 2022.



PROGRESS REPORT ON REGISTRATION AND ENROLMENT OF STUDENTS IN 2022

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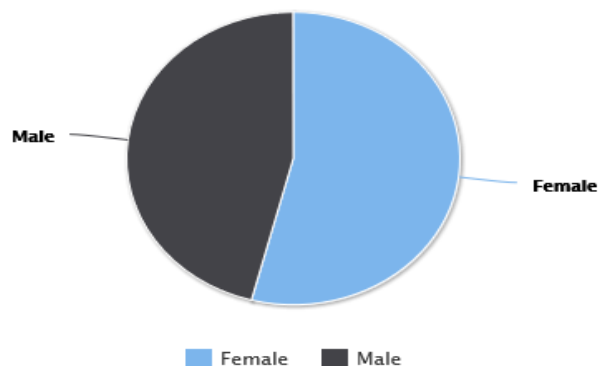
Application and Registration statistics

2022 Applications: 116 848

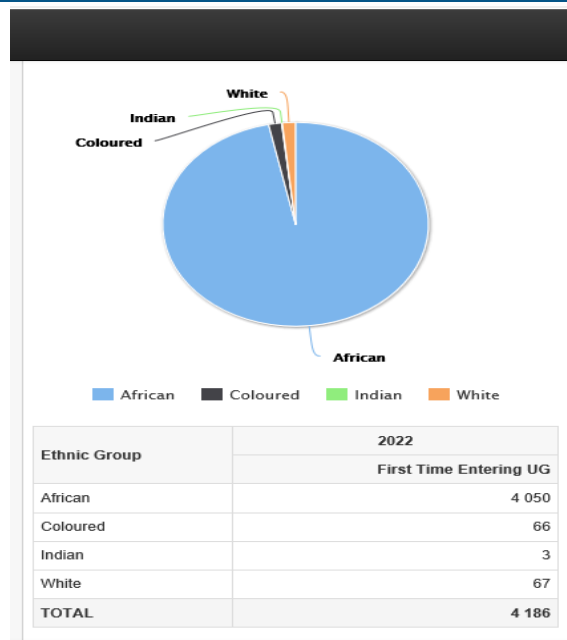
FTE: 4186 (89.7% toward target)

FTE Target: 4677

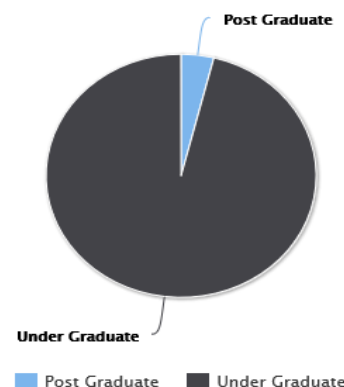
Cumulative Headcount: 11 461



Selected Academic Year
First Time
Entering UG
Headcount by
Gender



Selected Academic Year
First Time
Entering UG
Headcount by
Ethnic Group



Selected Academic Year
Headcount by
Graduate Level



PROGRESS REPORT ON DISBURSEMENT OF THE NSFAS FUNDING AND ALLOWANCES TO STUDENTS

1 of 2



Central University of
Technology, Free State

2021 NBA REPORT

	NO. OF STUDENTS	TUITION FEE	ACCOMMODATION	BOOKS	FOOD	TRANSPORT	LIVING ALLOWANCES	TOTAL NBA
DHET/Bursary-2021	13933	292 760 742.00	229 381 980.00	48 903 400.00	104 837 425.00	15 220 125.00	25 126 325.00	716 229 997.00
DHET/Disability-2021	54	1 173 300.00	717 730.00	189 800.00	390 830.00	82 875.00	93 670.00	2 648 205.00
DHET/Grant_Capped-2021	2122	37 339 880.00	41 105 535.00	8 444 800.00	17 989 673.00	2 215 130.00	4 254 980.00	111 349 998.00
NATSKILLS-2021	1	28 520.00	-	5 200.00	12 100.00	7 500.00	2 900.00	56 220.00
Grand Total	16110	331 302 442.00	271 205 245.00	57 543 200.00	123 230 028.00	17 525 630.00	29 477 875.00	830 284 420.00

PROGRESS ON 2017 – 2020 NSFAS CLOSE-OUT REPORT

2 of 2



Central University of
Technology, Free State

YEAR	ON NBA	% NBA OF EXPECTED	ADDITIONAL IDENTIFIED TO BE FUNDED	TOTAL STUDENTS EXPECTED TO BE FUNDED	CUT CLAIM ON NSFAS
2017	9 495	96%	418	9 913	-R40 938 203
2018	9 960	88%	1 375	11 335	R42 324 858
2019	10 057	79%	2 661	12 718	R219 916 548
2020	8 772	62%	5 427	14 199	R445 144 432
2021	11 871	73%	4 348	16 219	R282 685 423
Total	50 155	78%	14 229	64 384	R949 133 058

OVERVIEW OF THE INSTITUTION'S FINANCIAL POSITION

1 of 3

Budget Analysis

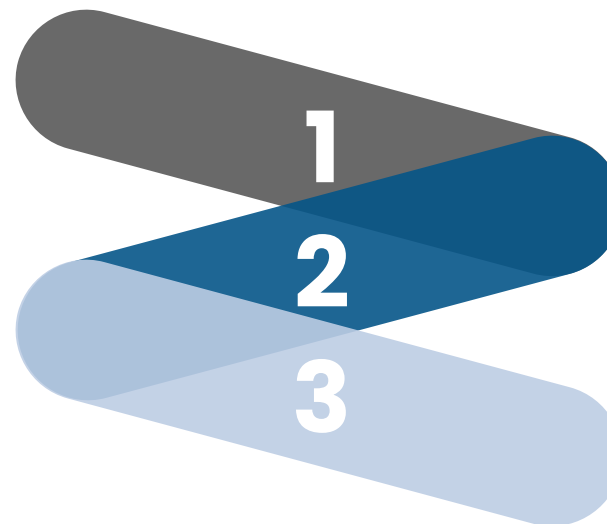
1. Savings of 13 % (R 174 million) at the end of the fourth quarter 2021 due to work from home.
2. Earmarked grants were underspent with R 57 million due to working from home.
3. Excluding the earmarked grants allocation, saving of 10% (R 116.7 million).
4. Outstanding commitments are R 96 million as at 31 December 2021.
5. Total savings after outstanding commitments is R17.5 million.

Cashflow Overview

1. Opening operational cash balance R 56.3 million.
2. Total cash outflow of R 97.7 million for the year.
3. Transfers from cash management solutions to fund operations R 105 million.
4. Closing operational cash balance R 64 million.
5. Long term investments – R 179.5 million.
6. Cash management solutions – R 953.6 million.
7. R 564 million capital relates to DHET project funds.

Debtors as at 31 Dec 2021

1. The total outstanding debtors with debit balances as at 31 December 2021 is R 1.895 billion (Dec 2020: R1,364 billion).
2. CUT and NSFAS are in the process of finalising the 2017, 2018 and 2020 close-out reports.
3. Only after this process is finalised the Historic Debt applications for the 2018 and 2019 years can be finalised.





OVERVIEW OF THE INSTITUTION'S FINANCIAL POSITION

2 of 3

Year on year evaluation of actual costs (2020 & 2021)

DETAILS	TOTAL 2020	TOTAL 2021	VARIANCE AMOUNT (R)	VARIANCE %
INCOME VARIANCES				
Block grant	684 698 494	763 452 506	78 754 012	12%
Tuition Fee income	541 882 295	585 829 509	43 947 214	8%
Registration & Application Fee Income	17 404 307	20 737 969	3 333 662	19%
Govt Grant: Missing Middle	25 610 000	12 805 000	(12 805 000)	-50%
Increase in Other Income	15 654 225	19 419 320	3 765 095	24%
Total Variance Income	1 285 249 320	1 402 244 303	116 994 983	9%
EXPENSE VARIANCES				
Personnel Costs	570 191 405	633 274 921	63 083 516	11%
Bad Debts Provision	81 282 344	87 874 426	6 592 082	8%
Bursaries	21 428 792	21 829 815	401 023	2%
Missing Middle allocations	19 228 118	1 788	(19 226 330)	-100%
Other Current Operating Expenses	162 549 057	194 124 928	31 575 871	19%
Strategic Projects	7 590 551	21 399 659	13 809 108	182%
Buildings Repairs & Maintenance	11 602 451	16 565 888	4 963 437	43%
Total Variance Operating Expenditure	873 872 718	975 071 425	101 198 707	12%
CUT Contribution IEG Funding	10 000 000	22 973 000	12 973 000	130%
CUT Contribution DST Funding	5 000 000	5 000 000	-	0%
Emergency Fund - Academic Programme	9 815 085	-	(9 815 085)	-100%
Reprioritised for Allowances	71 255 938	-	(71 255 938)	-100%
Accommodation allowances from CUT funds	-	36 524 244	36 524 244	0%
Top slice	7 625 095	8 663 127	1 038 032	14%
Reserve Growth	9 516 298	10 861 694	1 345 396	14%
	987 809 287	1 059 093 490	71 284 203	7%
Capital Expenditure	16 650 212	39 034 950	22 384 738	134%
Total Variance Expenditure	1 004 459 499	1 098 128 440	93 668 941	9%
NET SURPLUS	280 789 821	304 115 864	23 326 042	8%



OVERVIEW OF THE INSTITUTION'S FINANCIAL POSITION

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Budget analysis – 31 December 2021

OVERALL CUT BUDGET	BUDGET	ACTUAL	VARIANCE (BUDGET - ACTUAL)	% SPENT
Divisions	2021 R'	2021 R'	2021 R'	
Vice-Chancellor	61 943 701	68 809 417	(6 865 716)	111%
Teaching and Learning	436 412 256	387 944 840	48 467 416	89%
Registrar	100 177 317	83 110 926	17 066 391	83%
Research and Innovation and Engagements	99 837 354	75 374 440	24 462 914	75%
Resources and Operations	386 170 876	307 729 421	78 441 455	80%
Emergency Fund - Academic Program	-	-	-	0%
Top Slice and Reserve growth	47 497 820	47 497 820	-	100%
Accommodation allowances for students	-	36 524 244	(36 524 244)	0%
Bad debts and Missing Middle allocation	78 425 067	87 876 214	(9 451 148)	112%
Grants for earmarked funds	104 317 000	47 010 804	57 306 196	45%
Grant to improve Enrollment Planning	978 000	-	978 000	0%
Total	1 315 759 392	1 141 878 127	173 881 265	87%
Economic Classification				
Compensation of Employees	706 010 033	632 091 773	73 918 260	90%
Goods and Services	393 414 158	341 796 505	51 617 653	87%
Grants for earmarked funds	104 317 000	47 010 804	57 306 196	45%
Emergency Fund - Academic Program	-	-	-	0%
Transfers and Subsidies (Reserve Growth; Contingency etc.)	47 497 820	47 497 820	-	100%
Assistance to self-funded students	9 285 208	-	9 285 208	0%
Accommodation allowances for students	-	36 524 244	(36 524 244)	0%
Grant to improve Enrollment Planning	978 000	-	978 000	0%
Capital Assets	54 308 462	36 956 981	17 351 481	68%
Total	1 315 810 682	1 141 878 127	173 932 555	87%
Exclude: Grants for earmarked funds	(104 317 000)	(47 010 804)	(57 306 196)	45%
Total excluding Earmarked Grants	1 211 493 682	1 094 867 323	116 626 359	90%

SUCCESSSES AND CHALLENGES



Central University of
Technology, Free State

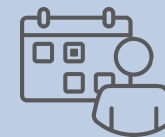
SUCCESSSES



- Operated within the budget and with available cash flows
- Cost containment measures ensure savings
- Improved spending on projects: earmarked, capital and strategic
- Improvement in tender processes

FINANCE

- Long process of 2017 – 2020 NSFAS close out project.
- Delay on NSFAS funds receivable – pressure of cashflow.
- Historical debt leading to students' certificates not released.
- Recoverability of historic debt – possibility to be written off.
- Even though surplus – increasing debt reduce cash flow.



CHALLENGES



PROGRESS REPORT ON THE FILLING OF THE VICE-CHANCELLOR (VC) POSITION

1 of 3

**Council
Resolution
RESOLUTION CM
11/21/11)**

1. Council noted that the initiation of the recruitment process for the Vice-Chancellor and Principal and the composition of the Selection Committee for the appointment of the Vice-Chancellor and Principal are governed by the Council-approved procedure for the recruitment and appointment of executive and senior managers.
2. Council noted the recruitment strategy, role profile and job advertisement, as approved by Exco of Council.
3. Council approved the initiation of the recruitment process of the Vice-Chancellor and Principal.
4. Council resolved that a blended (internal and external) recruitment process should be followed.

Council Resolution Point 4 in the resolution–(Hybrid model) the commencement of the filling of the role of Vice Chancellor and Principal commenced in Nov 2021 (Internal CUT recruitment Process).



PROGRESS REPORT ON THE FILLING OF THE VICE-CHANCELLOR (VC) POSITION

2 of 3

PROCESS

- Platforms used for advertising: CUT website, and Skillsmap, Higher Education Jobs, Careers24, LinkedIn. Newspaper advertisements (by CUT HR) – Sunday Times, Mail & Guardian, and City Press. Closing date: 28 Jan 2022.
- Closing date for applications by Academic Partners 13 Feb 2022.
- Special Exco of Council to discuss the candidate list (fully meet criteria), decide to either promote 'B' listed candidates (marginal candidates) to the 'A' list or relegate them to the 'C' list (those to be regretted), 18 Feb 2022.
- Responsible parties will include the Exco of Council supported by the Registrar.
- Agree on evaluation criteria, scoring and core weightings.
- Recommend short list of candidates for interviews.

PROGRESS REPORT ON THE FILLING OF THE VICE-CHANCELLOR (VC) POSITION

3 of 3

For consideration during the recruitment process (phase 1)

1. All internal applications received by CUT HR have been shared with Academic Partners to avoid duplication of applications.
2. Academic Partners will present to Exco of Council the portfolio of each candidate for consideration including the internal applications shared with Academic Partners to ensure consistency from start to end of the process. Academic Partners to present the methodology and the battery of assessments that will be used for consideration.
3. Potential candidates discussed with the Exco of Council to present 'A' list (fully meet criteria), decide to either promote 'B' listed candidates (marginal candidates) to the 'A' list or relegate them to the 'C' list (those to be regretted). [18 Feb 2022](#).
4. Proposals to change the shortlist will be submitted to the Exco of Council, who will make the final decision in this regard after taking note of such proposals received. [28 Feb 2022](#) – Institutional Registrar.
5. Prepare report for submission to Council Distribute proposed shortlist to Council. [02 Mar 2022](#) – Institutional Registrar.
6. Exco of Council to Consider Councilors proposals and approve preliminary shortlist. [10 Mar 2022](#).
7. ABAC evaluations & Fit Interviews commence of all candidates (CUT and AP sourced). [14 to 18 Mar 2022](#)

For consideration during the recruitment process (phase 2)

1. Approved final shortlist by Council. [24 Mar 2022](#).
2. Final interview pack circulated and received by Selection Committee. [04 Apr 2022](#).
3. Compile a draft Selection Committee report for Senate, IF, SRC and AA following the selection interviews, where-after such draft Selection Committee report shall first be approved by the Selection committee. [05 to 8 Apr 2022](#).
4. Distribute to Selection Committee. [11 Apr 2022](#).
5. Selection Committee Approve interview report for consultation purposes. [15 Apr 2022](#).
6. Presentations by candidates to Senate and the broader University community on a topic identified by the Chairperson of the Selection Committee. [18 to 22 Apr 2022](#).
7. Distribute the Selection Committee report to Senate, IF, SRC and AA with supporting documents. [18 to 22 Apr 2022](#). After which recommendations from these bodies will be submitted to HRC by [09 May 2022](#) en route to Council for consideration. [17 May 2022](#).
8. Council Meeting – Discussion of Selection Committee's recommended Candidate and appointment of VC proposed. [15 Jun 2022](#).



SAFETY AND SECURITY: MEASURES TO CURB INCIDENCES OF GBV AND FEMICIDE

1 of 2

PURPOSE

Policy on harassment, sexual
harassment and gender-based
violence (GBV)

- Establish a safe, enabling environment that is free of harassment, sexual misconduct and GBV for all members of the CUT community.
- Clarify and facilitate an understanding of what constitutes sexual harassment, sexual misconduct or GBV in the workplace
- Ensure the effective and efficient investigation and prosecution of perpetrators

Procedure on harassment, sexual
harassment and gender-based
violence (GBV)

- Create an enabling framework to address individual, structural and systemic forms of discrimination and exclusion
- Define procedures to be followed when filing complaints of sexual harassment and GBV
- Define the formal and informal procedures for dealing with complaints
- Define disciplinary sanctions

Procedure for reporting, referral and
support of student survivors of GBV

- Direct the reporting, referral and support for survivors of sexual harassment, assault, rape and other related offences
- Ensure availability of integrated and comprehensive service to survivors
- Define reporting channels for students who are survivors of GBV
- Define roles for designated Offices (Residences, Faculties, Wellness Centre and Protection Services)

Security Policy

- Ensure that all security controls and measures are effective in addressing identified security threats
- Govern the protection and safeguarding of CUT employees, contractual employees, students, and visitors

SAFETY AND SECURITY: MEASURES TO CURB INCIDENCES OF GBV AND FEMICIDE

2 of 2

Protection Services Measures



Attend to incidents of GBV as soon as they are reported



Ensure deployment of both male and female officers when responding to incidents



Established Investigator post with a focus on GBV related cases.



Prioritising investigations of GBV cases



Procurement of an automated investigation system



GBV awareness and training for Security personnel

Overview of student housing and infrastructure projects

The Central University of Technology Council has adopted and commissioned the implementation of Vision 2030. Through the Vision 2030, the Estates and Infrastructure department will;

1. Provide physical infrastructure that will enable the offering of a living and learning experience to its students; through the provision of either on-campus or accredited off-campus students residence that offer multi-purpose learning and extra-curricular infrastructure, ideally situated within a safe walking distance to and from campus.
2. Provide 50% of CUT students with accommodation in CUT-owned residences.



OVERVIEW OF STUDENT HOUSING AND INFRASTRUCTURE PROJECTS

Infrastructure Developments Principles



Adequate project management resources;
Spatial planning synchronized with growth, traffic management, bulk services availability;



Optimal use of space;
Repurposing and flexibility;



Land availability and Right of use and assignment
Communal spaces



Collaborative spaces
Energy and resources policy



Safety and Compliance
Adaptive and flexibility (smart)



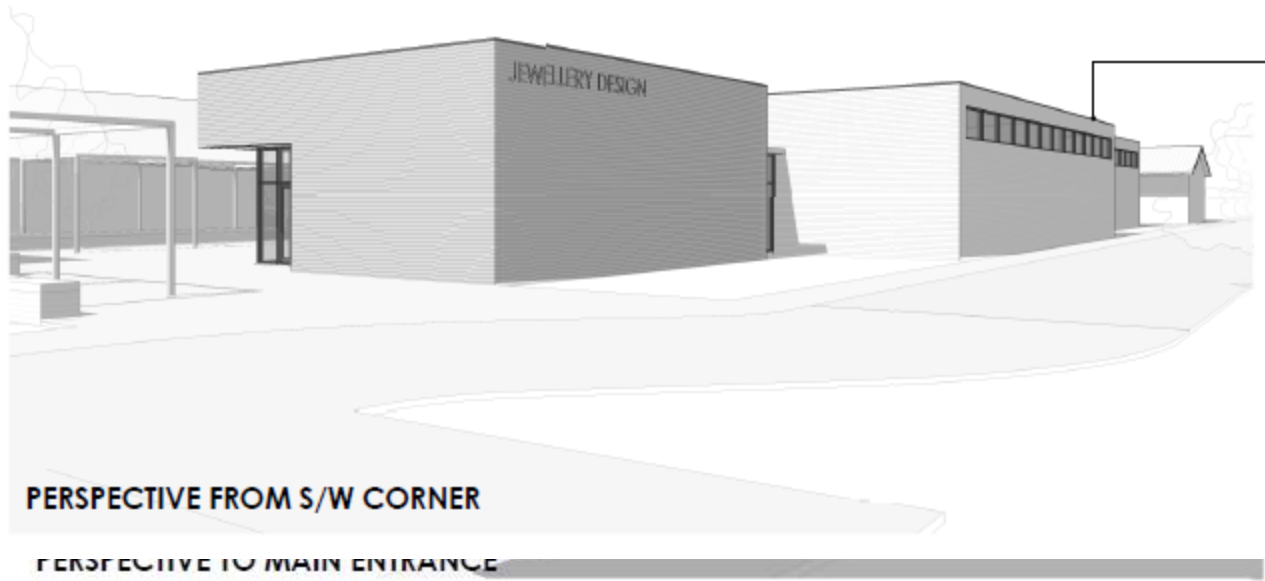
Maintenance planning and breakdown
maintenance
COVID-19-design and configuration



Bloemfontein Campus land parcels

- Existing Main Campus, bounded by President Boshoff Street, St Georges Street, President Brand Street and President Avenue;
- ZR Mahabane Precinct, located east of President Brand Street and North of Suid Street;
- Sports Precinct, located on the east side of President Brand Street between Suit Street and President Avenue;
- Loggies Residence and a series of historical houses, located east of Saltzmann Street between Goddard and Kazerne Streets;
- A pair of historical houses, located on the east side of Bellevue Street;
- The Science Park site, located at the corner of President Boshoff Street and President Avenue;
- A series of linked land parcels located in the Free State Psychiatric Hospital precinct, south of President Avenue, currently owned by Free State Provincial Government. Commonly referred to as the Free State Sports Science Institute or the FSSSI. The intention is to exchange this property with the CUT owned property at Cecelia Park.





PERSPECTIVE FROM S/W CORNER

PERSPECTIVE TO MAIN ENTRANCE

Currently accommodated in temporary asbestos prefabricated structures at present, which is not giving justice to such a specialized trade, while the facility cannot accommodate all of the needs associated with this type of operation.

The new facility will accommodate all the various functions and operations required for this specialized function.



CONTROLLED
ACCESS



CONTROLLED
ACCESS



BELLEVUE STREET

BLOCK 1

BLOCK 3

BLOCK 2

BLOCK 4

STUDENT
SPACES

WARDENS
HOUSING

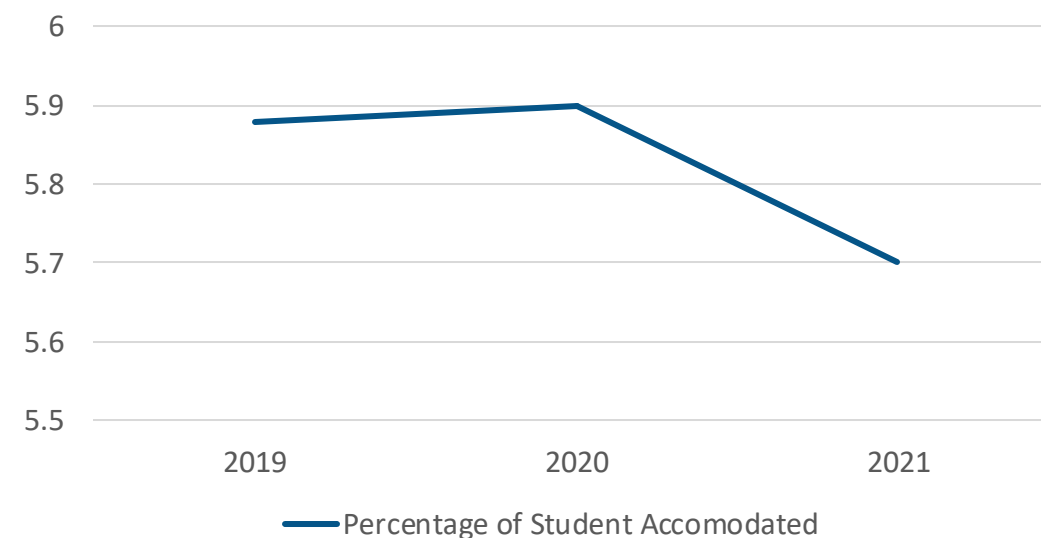
UNIVERSAL
ACCESS
SEMINAR



CURRENT RESIDENCE CAPACITY: BLOEMFONTEIN

YEAR	TOTAL STUDENT ADMISSION AT CUT	TOTAL STUDENTS ADMITTED AT RESIDENCE	PERCENTAGE
2021	14 973	858	5.7%
2020	14 479	858	5.9%
2019	14 578	858	5.88%

Percentage of Student Accommodated
last 3 years







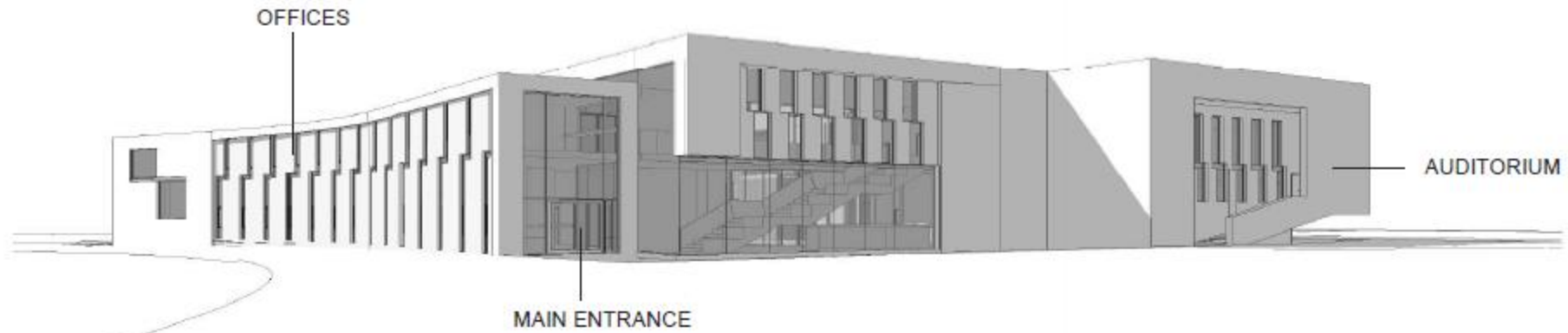
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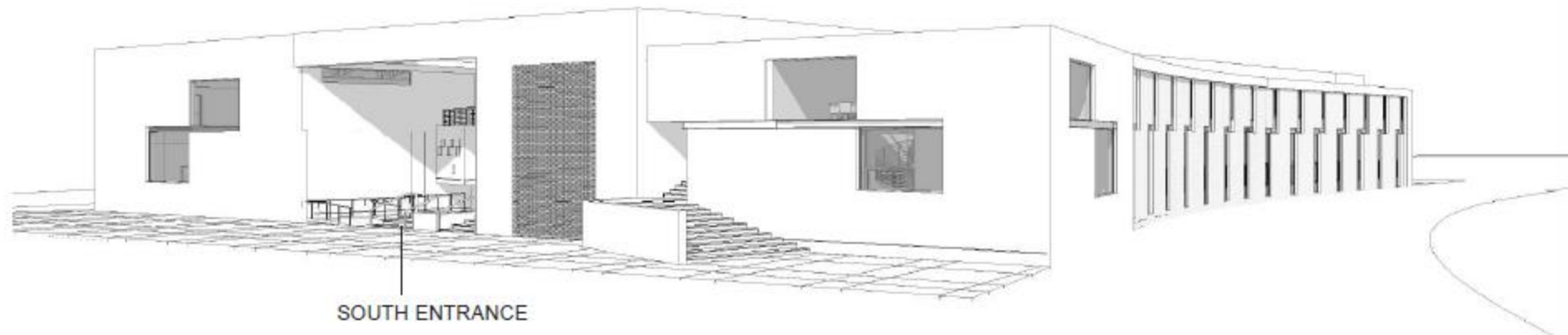
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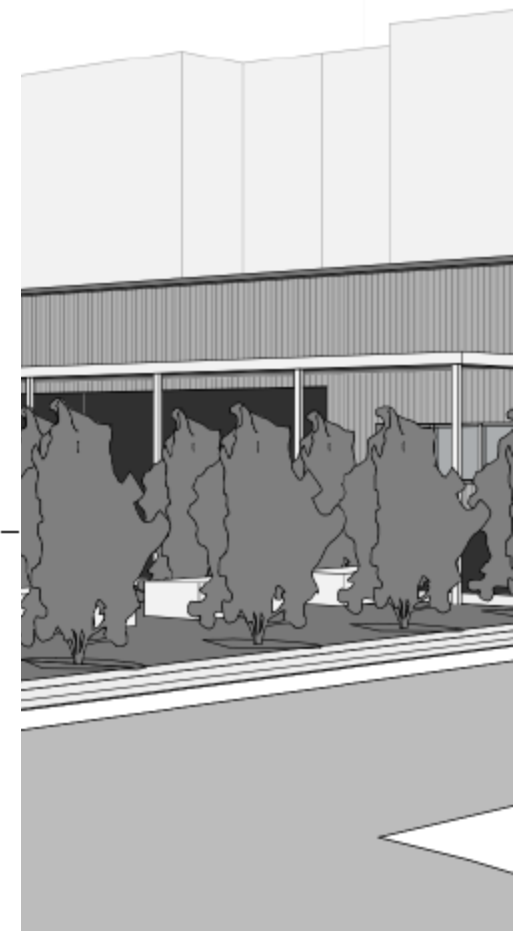
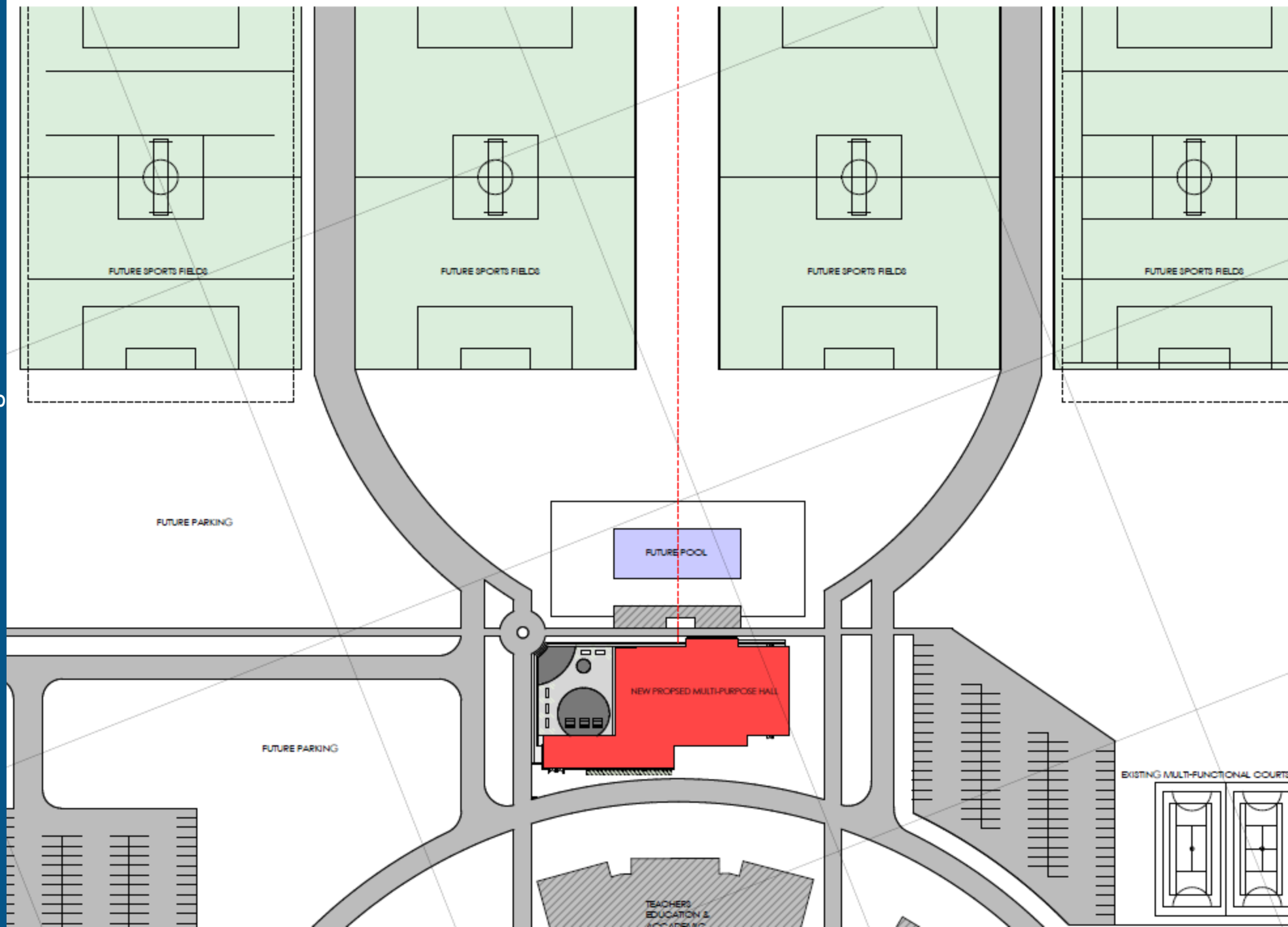


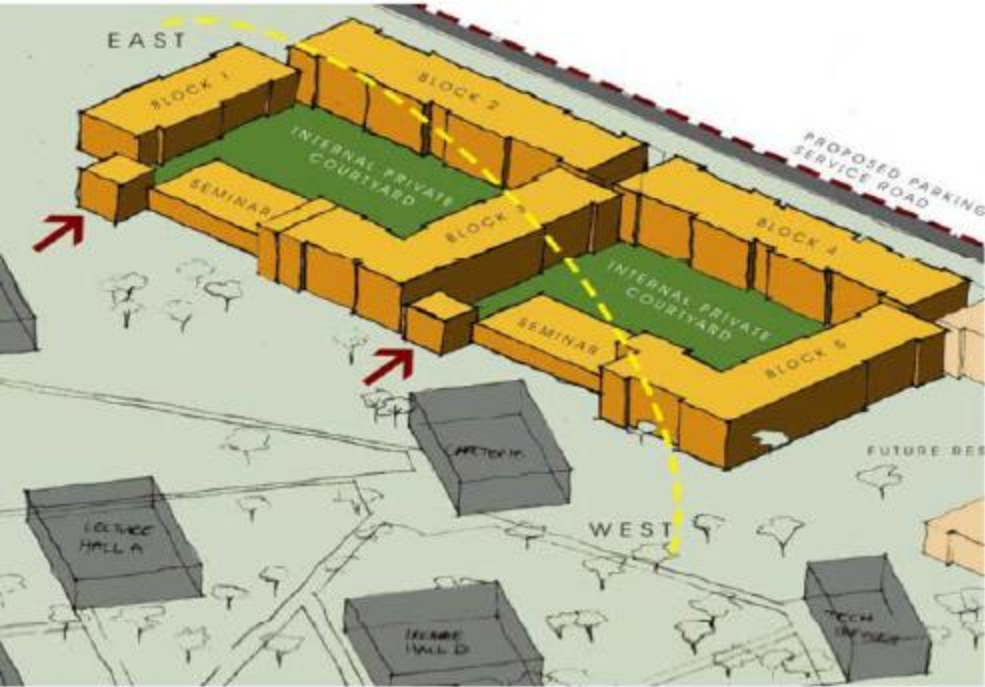


North East View



South East View





capacity 404-bed, subject to approval of funding from the 6th IEG Funding Application.

However, with the available funding presently, a guaranteed 232 beds will be still be erected.

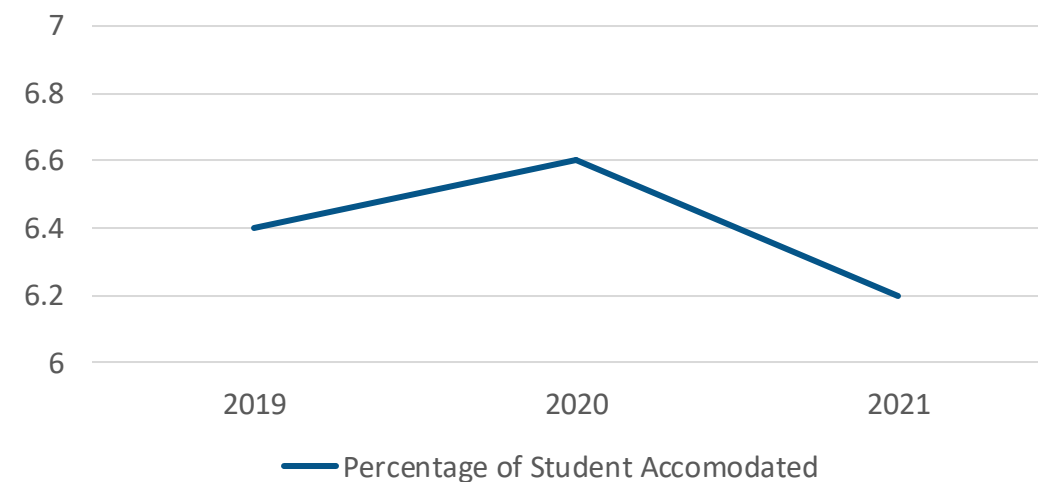


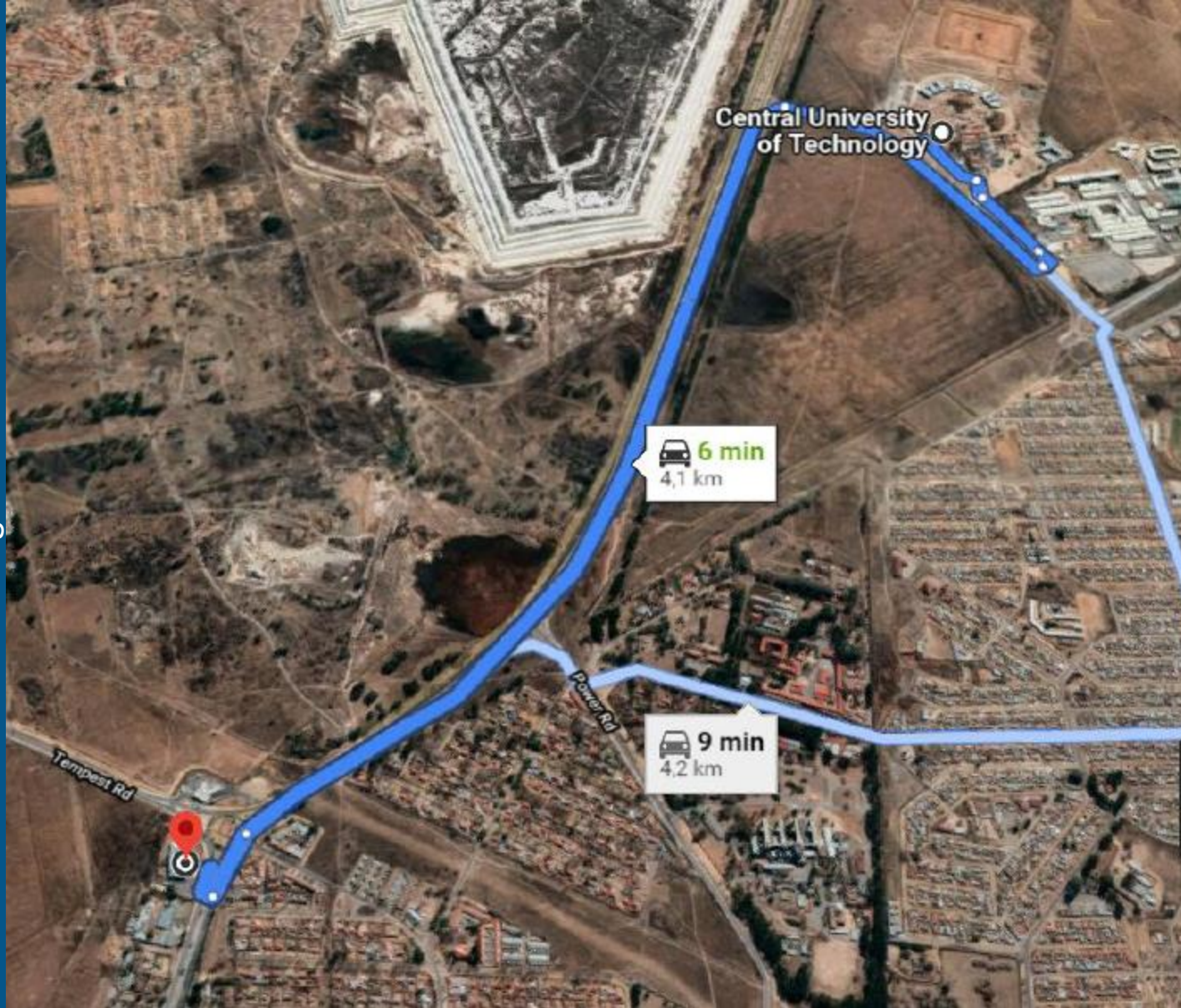


CURRENT RESIDENCE CAPACITY: WELKOM

YEAR	TOTAL STUDENT ADMISSION AT CUT	TOTAL STUDENTS ADMITTED AT RESIDENCE	PERCENTAGE
2021	4 025	249	6.2%
2020	3 777	249	6.6%
2019	3 897	249	6.4%

Percentage of Student Accommodated
last 3 years





Acquisition: Student SA Accommodation

This building is earmarked for purpose acquisition with the view to greatly enhance CUT's Student Accommodation Stock.

The facility can accommodate 238 students.

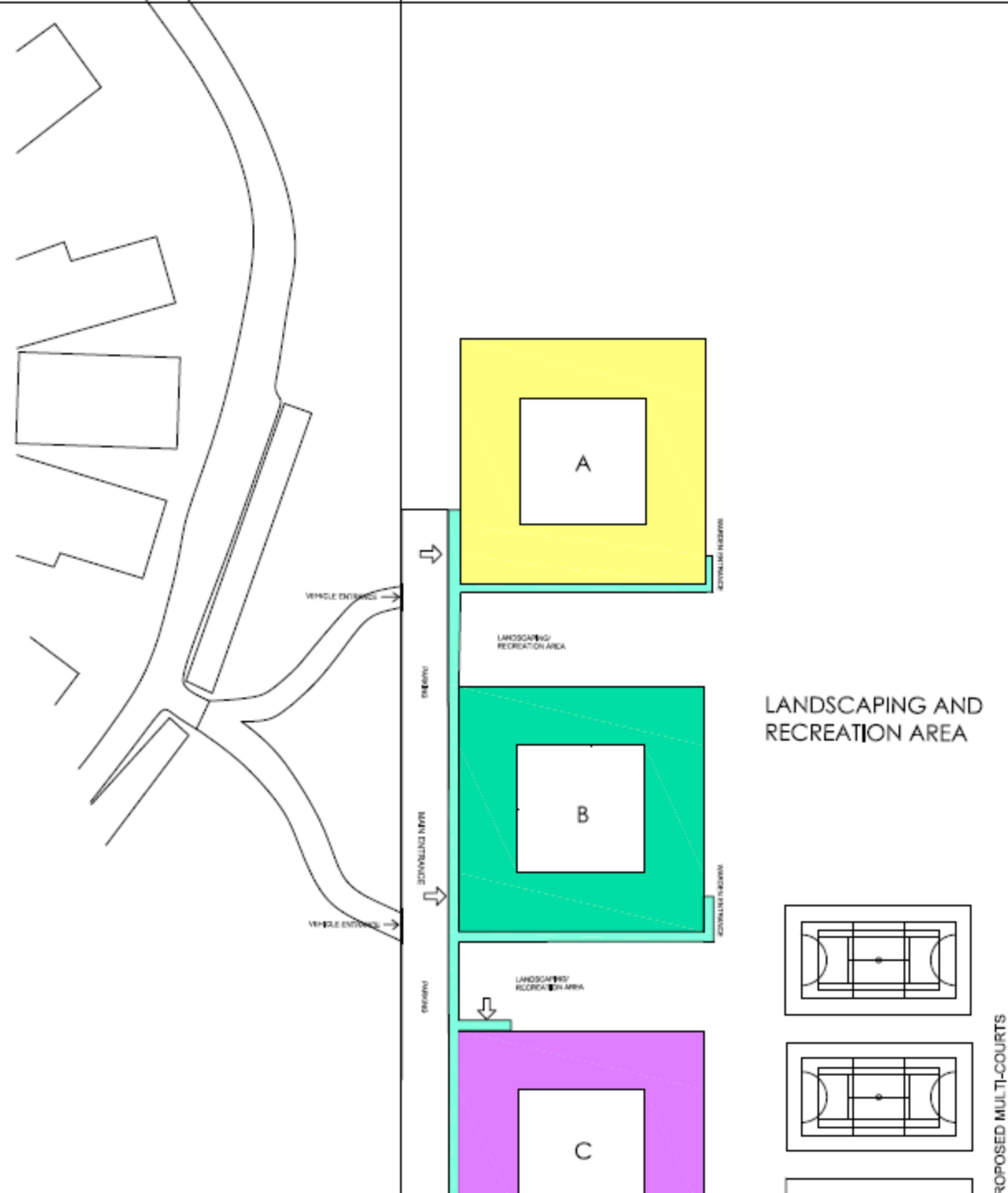
It is located about 4KM from the Welkom Campus.



ALL BUILDINGS TOTAL: AREA SCHEDULE			
	ROOM NAME:	No:	Total Area (m²)
	ENTRANCES	3	100.5
	SECURITY ROOMS	3	33.9
	STORE ROOMS	12	70.8
	MAINTENANCE AREAS	0	0
	SINGLE ROOMS	105	787.5
	DOUBLE ROOMS	441	5 953.5
	ROOMS FOR DISABLED	6	81
	SUB-WARDEN	9	121.5
	WARDEN RESIDENCE	3	210
	KITCHEN AREAS	33	1 818
	STUDY AREAS	0	0
	LAUNDRY AREAS	6	372
	COMMON AREAS	27	1 138.2
	GUEST TOILET	3	13.8
	ABLUTION AREAS	39	1 342.2
	TOTAL STUDENTS	1 002	
	GROSS BUILDING AREA		15 539.94

Bed Requirement: 1000
 Beds Provided: 1002
 Single Bedrooms: 105
 Double Bedrooms: 441
 Gross Building Area: 15 539.94 m²
 Site area: 4.76 ha

All buildings have 3 floors



THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH OTHER SPECIFICATIONS. ALL CONSTRUCTION MUST COMPLY WITH THE STANDARDS OF THE REGULATORY LOCAL AUTHORITY AS WELL AS THE NATIONAL BUILDING REGULATIONS. ALL DIMENSIONS AND QUANTITIES ARE GIVEN IN METRIC UNITS. ALL AREAS ARE APPROXIMATE. DRAWINGS AND QUANTITIES MUST BE CHECKED BEFORE ANY MATERIALS ARE ORDERED OR BLUETED WORK COMMENCED. ANY DISCREPANCIES AND QUERIES MUST BE DIRECTED TO THE ARCHITECT FOR APPROVAL. COPYRIGHT © RESERVED.

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REVISION		
NO	DATE	DESCRIPTION

CLIENT		
DHET AND CUT		
APPROVED	SIGNATURE	DATE

ARCHITECTURE DESIGN INNOVATION THE CREATIVE AXIS ARCHITECTS		
ARCHITECT	SACAP No.	SIGNATURE

SKETCH PLANS		
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PROJECT		
STUDENT HOUSING INFRASTRUCTURE PROGRAMME CENTRAL UNIVERSITY OF		

SUCCESSSES AND CHALLENGES

1 of 7



Central University of
Technology, Free State

SUCCESSSES



WELKOM CAMPUS

- Two MOUs signed with Lejweleputswa District Municipality and Matjhabeng Local Municipality
- Increase in student numbers and course offerings.
- Improved campus health services, e.g. new campus clinic.
- Improved security, e.g. biometric

- Prolonged repositioning process.
- Shortage of infrastructure,
- Student protests. Mainly due to NSFAS issues.



CHALLENGES

SUCCESSSES AND CHALLENGES

3 of 7



Central University of
Technology, Free State

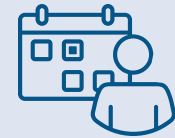
SUCCESSSES



ESTATES AND INFRASTRUCTURE

- Leadership development that is implemented to all staff (succession planning execution).
- Student facilities that are fit-for-purpose.
- Adaptability (considering the Covid-19), the university applied a hybrid model.
- Customer focus (internal and external stakeholders) in meeting the needs.

- Limited funding to drive Smart Campus Strategy implementation.
- Shortage of student university-owned residences.
- Project Management Office Capacity constraints.



CHALLENGES

SUCCESSSES AND CHALLENGES

4 of 7



Central University of
Technology, Free State

COMMUNICATIONS AND MARKETING

SUCCESSSES



- Enhanced Content Management System for the public facing CUT Website.
- Successfully hosting flagship internal and external events.
- The outdoor branding project bears evidence of the new brand personality we are bringing to CUT
- The social networks are given CUT content an extended life span with the use of screengrabs (as elements of design) from the official homepage (integration of social media and CUT Website). This approach has grown the platforms and proven the right direction for CUT's community.
- Significantly higher Advertising

- Recent institutional instability negatively impacted institutional identity and communications content.
- Continued confusion of institutional typology – continued reference as “The Technikon” periodic inaccurate media reports.
- Inability to attract grade 12 students who have excelled academically in spite of hosting the “FS Well Done Function” annually.
- Feeder Bursary Scheme has been one of the pressing challenges for the past three years due to the fact that NSFAS has made

CHALLENGES



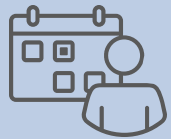
SUCCESSSES AND CHALLENGES

5 of 7



Central University of
Technology, Free State

SUCCESSSES



RISK MANAGEMENT AND STRATEGIC PROJECTS

- Enhanced enterprise risk management maturity.
- Advancing social mandate through insourcing.
- Effective implementation of Health and safety protocols.
- Teamwork and collaboration.

- Management of stakeholder expectations.
- Reliance internal dependencies resulting in delays.
- COVID-19 pandemic adversely affecting plan implementation and operations.
- Insufficient capacity to implement all deliverables due to limited staff.



CHALLENGES

SUCCESSSES AND CHALLENGES

6 of 7



Central University of
Technology, Free State

HUMAN RESOURCES

SUCCESSSES



- Improving CUT's Employee Value Proposition with the transfer of employee's pension fund from the NTRF to Sanlam Umbrella Fund.
- Continued improvement in the contribution made through the Employment Equity Act to the university's transformation into a workplace that reflects South Africa's demographics.
- Minimal disruption in the delivery of Human Resources services during the global COVID-19 pandemic.
- Tracking System, SkillsMap, that increased efficiencies in the recruitment process.

CHALLENGES



- Developing a flexible and responsive HR Model – University of the Future.
- While implementation of the Employment Equity Plan is successful overall, challenges do remain –with the appointment and retention of certain designated groups, e.g. people with disabilities.
- ITS / Adapt, HR systems limitations.
- The issues submitted by parties as agenda items were taking longer than expected to be resolved.
- Outdated relation agreement between entered into between university and both unions pose a risk for healthy engagements on issues of mutual interests



STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

1 of 6

Headcount enrolment among Universities of Technology

INSTITUTION ACTIVE	2014	2015	2016	2017	2018	2019
Cape Peninsula University of Technology	33 186	32 674	34 455	34 702	34 222	33 941
Central University of Technology	14 352	14 193	15 708	18 185	19 464	21 225
Durban University of Technology	26 472	27 023	28 377	29 787	31 211	35 442
Mangosuthu University of Technology	11 377	11 518	11 588	12 665	13 354	14 328
Tshwane University of Technology	56 785	57 246	58 901	63 032	65 920	67 673
Vaal University of Technology	19 319	17 678	19 241	19 218	21 067	21 927
Total	161 491	160 332	168 270	177 589	185 238	194 536

Note the 2019 status:

CUT is the second smallest University of Technology.



STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

2 of 6

CUT comparison with other Universities of Technology (based on audited HEMIS

submission)

INSTITUTION ACTIVE	PASS RATE	GRAD UATE S PER ACAD STAFF	STUDE NT FTE PER ACAD STAFF FTE	ACAD STAFF WITH DOCTO RAL	PASS RATE	GRAD UATES PER ACAD STAFF	STUDE NT FTE PER ACAD STAFF FTE	ACAD STAFF WITH DOCTO RAL	PASS RATE	GRADUA TES PER ACAD STAFF	STUDEN T FTE PER ACAD STAFF FTE	ACAD STAFF WITH DOCTOR AL	PASS RATE	GRADUA TES PER ACAD STAFF	STUDEN T FTE PER ACAD STAFF FTE	ACAD STAFF WITH DOCTOR AL
Cape Peninsula University of Technology	79.6%	10.0 7	23.7	24.94 %	78.9%	10.78	23.6	25.50 %	79.1%	11.31	24.1	29.98%	79.9%	10.94	24.3	30.8%
Central University of Technology	78.4%	12.5 4	25.6	33.33 %	76.1%	12.51	37.8	37.05 %	77.5%	14.24	39.7	40.00%	75.6%	15.36	39.3	39.9%
Durban University of Technology	84.6%	11.9 4	31.5	22.98 %	86.2%	13.52	31.7	24.10 %	87.0%	13.19	33.3	29.59%	87.1%	15.21	37.4	31.7%
Mangosuthu University of Technology	81.5%	11.4 2	28.1	12.94 %	80.3%	11.50	41.2	14.63 %	80.8%	12.12	41.2	16.67%	79.6%	11.54	42.5	19.5%
Tshwane University of Technology	76.9%	13.6 7	32.3	27.78 %	77.0%	15.23	29.4	29.72 %	76.9%	14.84	25.4	31.76%	76.7%	18.18	26.4	33.7%
Vaal University of Technology	75.6%	10.5 7	22.2	17.53 %	76.2%	10.31	22.7	19.40 %	76.2%	11.84	26.0	20.31%	74.3%	10.92	27.6	21.2%
Grand Total	79.1%	11.8 3	27.8	24.57 %	79.0%	12.71	28.7	26.14 %	79.3%	13.06	28.2	29.30%	79.0%	14.30	29.6	30.8%

Note the 2019 status:

Pass rate second lowest among UoT. | 2nd highest number of Graduates per Academic Staff.

Second highest ratio of Student FTE per Academic Staff FTE. | Highest proportion of academic with doctoral qualification.



STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

3 of 6

Graduation rate

INSTITUTION ACTIVE	2014	2015	2016	2017	2018	2019
Cape Peninsula University of Technology	24.8%	25.5%	24.6%	26.2%	26.6%	25.0%
Central University of Technology	22.7%	23.9%	23.7%	21.0%	21.9%	22.1%
Durban University of Technology	25.1%	24.2%	24.5%	26.4%	25.6%	26.1%
Mangosuthu University of Technology	21.5%	21.6%	19.8%	18.6%	19.6%	17.7%
Tshwane University of Technology	20.3%	22.2%	22.3%	23.4%	21.0%	24.9%
Vaal University of Technology	21.5%	22.5%	21.3%	21.6%	21.9%	18.8%
Grand Total	22.4%	23.4%	23.0%	23.7%	22.9%	23.6%

Note the 2019 status:

4th place in graduation rate.

STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

4 of 6

CUT Student overview (CUT student success rate)

YEAR	STUDENT HEADCOUNT	FTE	FTE	FTE	GRADUATES
		ENROLLED	PASSED	% PASS	
2012	12 723	9 744.8	7 498.8	76.95%	3 159
2013	13 302	9 962.7	7 617.7	76.46%	3 217
2014	14 351	10 823.7	8 111.9	74.95%	3 255
2015	14 159	10 008.9	7 726.5	77.20%	3 388
2016	15 678	12 373.8	9 731.4	78.65%	3 723
2017	18 067	13 647.0	10 671.9	78.20%	3 816
2018	19 550	15 091.2	11 784.3	78.09%	4 271
2019	21 159	15 563.8	11 695.9	75.15%	4 700
2020	21 077	15 613.0	12 675.5	81.19%	4 622
2021	22 283	17 127.2	12 786.2	74.65%	821

Note:

Increased pass rate in 2020 compared to 2019. | Stable pass rate (2021 not final yet).

2019 growth in graduates – result of large pressure for BTech (Advanced Diploma) enrolment | 2021 stats for graduates not final yet.



STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

5 of 6

CUT Cohort Dropout by Base Enrolment and Dropout Year FTEN students

COHORT YEAR	ENTERING		DROPOUT YEAR			CUMULATIVE
	Cohort	Year 2	Year 3	Year 4	Year 5	Dropouts to Date
2018	4 214	420	220	82		722
		10.00%	5.20%	1.90%		17.10%
2019	4 429	431	125			556
		9.70%	2.80%			12.60%
2020	3 972	265				265
		6.70%				6.70%
2021	4 277					0
						0.00%

Note:

First time entering students drop-out rate during first year of study decreased from 10.00% in 2018 to 6.70% in 2020.

STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

6 of 6

CUT students throughput

	YEAR 1	GRADUATES	GRADUATES	GRADUATES	GRADUATES	%
	COHORT	MIN TIME	MIN TIME + 1	MIN TIME + 2	MIN TIME > 2	GRADUATES
2018	4 832	705	446	62	21	25.54%
2019	5 013	497	113	13	0	12.43%
2020	4 447	179	15	0	0	4.36%
2021	4 936	0	0	0	0	0.00%

Note:

Overwhelming majority of students (more than 92%) graduates within Min or Min +1 time.



CAUSES AND MEASURES PUT IN PLACE TO ADDRESS STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

1 of 2



Main causes of student success, drop-out and throughput rates that have been cited by students during the Covid-19 pandemic:

01

Psychological and emotional turmoil

Psychological and emotional turmoil caused by personal challenges such as family bereavement, lack of financial resources, or an unmanageable workload due to the brief semester were some of the main factors which affected student learning.

02

Connectivity

Lack of connectivity and technological devices.

03

Remote assessments

Venue for taking examinations remotely

04

Lecturer support

Lack of support from lecturers.



CAUSES AND MEASURES PUT IN PLACE TO ADDRESS STUDENT SUCCESS, DROP-OUT AND THROUGHPUT RATES

2 of 2



Measures in place to address the causes of student success, drop-out and throughput rates

01

Interventions

Institutional research performs analysis to identify qualifications with highest number of FTEN dropouts. For these qualification courses with lowest pass rate are identified. That information is provided to Assistant Deans: Teaching and Learning, and relevant section (Student Services and Centre for Innovation in Learning and Teaching) to introduce interventions.

02

Support programmes

The CILT has different programmes in place to support students such as supplemental instruction, peer mentorship programme for first year students and academic writing support at undergraduate level.

03

Identify at risk students as early as possible

Using PowerHEDA, a risk assessment model (based on past data, student educational background, performance on firsts assignments) is developed to identify FTEN students at risk of dropping out. In 2021 total of 1128 FTEN students were identified. This information was utilised for various interventions. An impact assessment is underway.

04

Technology provisioning

Provision of tablets and internet data during lockdown.

SUCCESSSES AND CHALLENGES

7 of 7



Central University of
Technology, Free State

SUCCESSSES



- Successful completion of 2021 academic year amid COVID-19 related challenges.
- Contribution to the successful crafting of the new vision for 2030.

TEACHING AND LEARNING

COVID-19 related challenges resulting in:

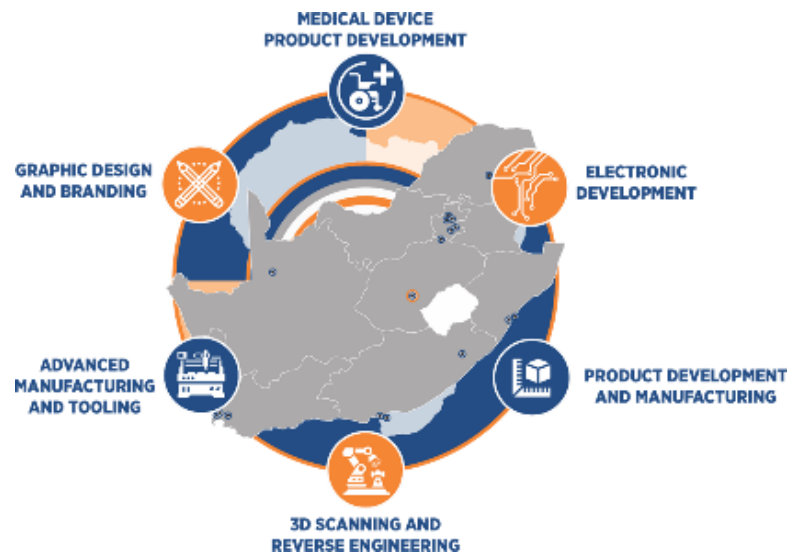
- Academic staff not getting permission and access to industries for industry exposure.
- Students not returning to campuses in their numbers for face-to-face teaching and learning.



CHALLENGES

ADVANCED MANUFACTURING ECO-SYSTEM

Product Development Technology Station



Central University of Technology, Free State

science & innovation
Department: Science and Innovation
REPUBLIC OF SOUTH AFRICA

THE NEWLY ESTABLISHED DSI & CUT FUNDED:

MedAdd
MEDICAL DEVICE ADDITIVE MANUFACTURING
(MEDADD) TECHNOLOGY DEMONSTRATOR

Bridging the Innovation Chasm in the Medical Device Industry through Additive Manufacturing

The grid shows six images of 3D printed medical devices: a human skull, a hand model, a prosthetic arm, a dental model, a jaw model, and a mechanical part.

CRPM

CENTRE FOR RAPID PROTOTYPING AND MANUFACTURING

Established in 1997

- Annually manufactures around 15 000 AM parts as part of >500 projects
- Have 750 commercial clients
- Support industries in New Product Development
- Going from CAD to prototypes and end-use products

The grid displays logos for the following organizations: LASHER, YATTRI, Saspine Pty(Ltd), SOUTHERN IMPLANTS, HENSOLDT, SAAB, DEFY, LEATICS, CENTURION, UVIRCO, AIRBORNE DRONES, denka, CSIR, AEROSUD, CASSIDIAN, DENEL, and Fi electric.



ISO Certification

CERTIFICATE

The Certification Body
of TÜV SÜD Management Service GmbH
certifies that

**Central University of Technology -
Product Development Technology Station**
6 Suid Street, Bloemfontein central, Bloemfontein, Free State
9301 Bloemfontein
Republic of South Africa

has established and applies
a Quality Management System for

Product development
including limited run tooling, tube notching, and sheet metal work.

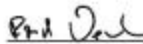
An audit was performed, Order No. 707133093.
Proof has been furnished that the requirements
according to

ISO 9001:2015

are fulfilled.

The certificate is valid from 2021-09-06 until 2024-09-05.

Certificate Registration No.: 12 100 62662 TMS



Head of Certification Body
Munich, 2021-09-14



SOUTH AFRICAN HEALTH PRODUCTS REGULATORY AUTHORITY



Licence number: 00001103MD_v1

LICENCE TO MANUFACTURE MEDICAL DEVICES

In terms of section 22C(1)(b) of the Medicines and Related Substances Act, 1965
To act as a Manufacturer

This licence is granted to:

Licence Holder
Central University of Technology, Free State
20 President Brand Street
Bloemfontein
9301

On the following terms and conditions:

The licence holder and the persons described and named in Annexure 1 shall at all times ensure that all medical devices distributed, irrespective of its registration status, comply with all the provisions of the Medicines and Related Substances Act, 1965, as amended and in particular with sections 14, 18, 18A, 18B, 18C, 19, 20, 22A, 22C, 22H, 23, 26, 28, 33 and the Regulations relating to Medical Devices 2, 3, 4, 5, 6, 13, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28 and all relevant South African Health Products Regulatory Authority Guidelines.

This licence consists of 4 pages.

This facility is authorised to perform the manufacturing activities listed in Annexure 1 to this licence.


Bhelele South-Africainale

CHIEF EXECUTIVE OFFICER

ORIGINAL DATE OF ISSUE: 05 July 2019

EXPIRY DATE: 05 July 2024

AMENDMENT DATE: 14 September 2020

This licence remains the property of the South African Health Products Regulatory Authority. Upon amendment, voluntary withdrawal, recall, suspension or revocation of the licence, the original licence must be returned to the Office of the Chief Executive Officer.
(Licence to Manufacture Medical Devices, v2)



Certificate

No. Q5 094449 0005 Rev. 00

Holder of Certificate: **Centre for Rapid Prototyping and
Manufacturing, Central University of
Technology, Free State**
20 President Brand Street
Bloemfontein
9300 SOUTH AFRICA

Facility(ies): **Centre for Rapid Prototyping and Manufacturing, Central
University of Technology, Free State**
20 President Brand Street, Bloemfontein, 9300 SOUTH AFRICA

Certification Mark:



Scope of Certificate: **Design, Development and Production of Patient Specific Custom
Made Titanium Implants by means of 3D Printing/Additive
Manufacturing.
Design, Development and Production of Patient Specific Custom
Made Preoperative Models, Jigs, Cutting Guides in Nylon by means
of 3D Printing/Additive Manufacturing.
Contract Production of Titanium Implants by means of 3D
Printing/Additive Manufacturing.
Contract Production of Preoperative Models, Jigs, Cutting Guides in
Nylon by means of 3D Printing/Additive Manufacturing.**

Applied Standard(s): **EN ISO 13485:2016
Medical devices - Quality management systems -
Requirements for regulatory purposes
(ISO 13485:2016)
DIN EN ISO 13485:2018**

The Certification Body of TÜV SÜD Product Service GmbH certifies that the company mentioned
above has established and is maintaining a quality management system, which meets the
requirements of the listed standard(s). See also notes overleaf.

Report No.: **IND2019002**

Valid from: **2019-06-27**

Valid until: **2022-06-26**

Date: **2019-06-27**


Stefan Pries
Head of Certification/Notified Body

DEPARTMENT OF SCIENCE AND INNOVATION (DSI) FUNDED MEDICAL DEVICE ADDITIVE MANUFACTURING (MedAdd) TECHNOLOGY DEMONSTRATOR



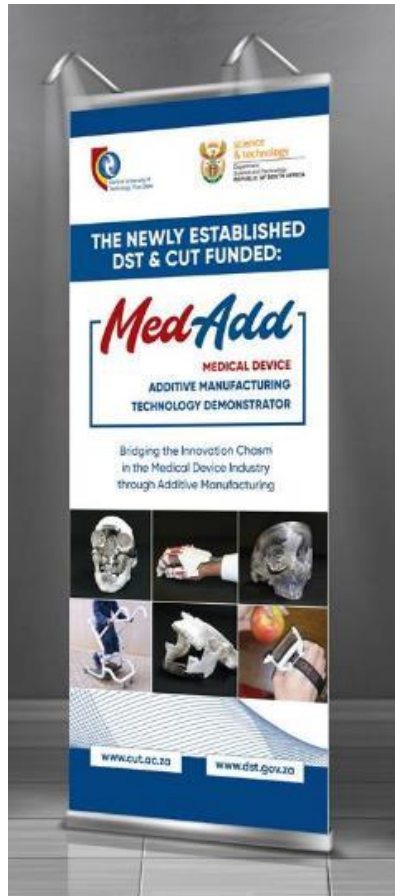
Bridging the Innovation Chasm in Medical Device Manufacturing: A Medical Device Additive Manufacturing (MedAdd) Technology Demonstrator

Central University of Technology, Free State is the leading South African university in the application of AM for the design and production of customised medical implants. **For South Africa to compete internationally, the local medical device industry needs to be supplemented with the latest technology, infrastructure, expertise and skills.** This can be aided by a technology demonstrator for additive manufacturing of medical devices.

PDTS is a collaborator in the established MedAdd programme. The MedAdd programme aims to bridge the innovation chasm with the use of additive manufacturing (AM) for the innovation, development and final manufacturing of medical devices by enhancing the current equipment and capabilities at the CUT.

A R71,700,000 (Seventy-One Million Seven Hundred Thousand Rand) grant from the DSI High-end Infrastructure Project was approved during February 2019. Both PDTS and the Centre for Rapid Prototyping and Manufacturing (CRPM) will greatly benefit from the MedAdd project as numerous high-end advance manufacturing machines and equipment will be procured and installed. These machines have been strategically selected to support the development of medical devices in South Africa.

DEPARTMENT OF SCIENCE AND INNOVATION (DSI) FUNDED MEDICAL DEVICE ADDITIVE MANUFACTURING (MedAdd) TECHNOLOGY DEMONSTRATOR

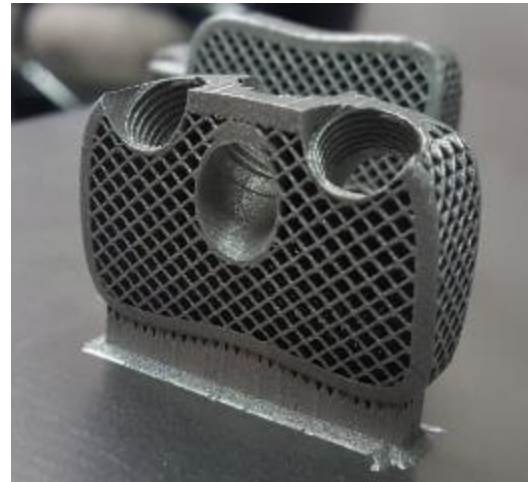
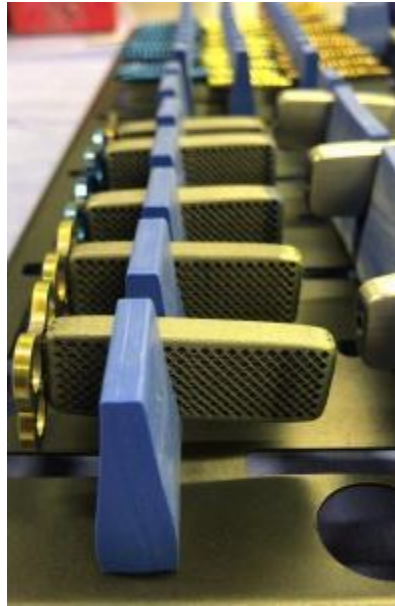


DESCRIPTION	BEFORE MEDADD	MEDICAL DEVICES MANUFACTURED FOR SA PATIENTS AS PART OF DSI MEDADD MARCH 2019 TO DECEMBER 2022
Maxillofacial	20	336
Orthopaedics	7	7265
Dental	0	529
Other (assistive devices etc.)	25	217 493
Total	52	225 623



APPLIED RESEARCH AND INNOVATION

5 of 7



Central University of
Technology, Free State

RURAL MOBILITY



Description

African countries such as South Africa face a large problem concerning mobility of persons with disability in rural communities. To supply the large need of people in rural areas, the government and organizations import cheap basic folding wheelchairs. These wheelchairs seldom come with or have available spare parts. This is concerning as these wheelchairs are not intended for the environmental challenges faced by South African disabled persons.

This rural mobility project as seen in the figures, **aimed to build a sustainable reliable solution to improve mobility of persons with disability in rural areas.** A wheelchair incorporates a clip-on hand cycle or free wheel to help with mobility and reliability of wheelchairs in rural areas and long-distance traveling. A person with disability will have a reliable wheelchair to move around indoors but has a clip-on hand cycle or free wheel to improve mobility on rough rural roads and over long distances. The TIA funded Product Development Technology Station (PDTs) housed at CUT developed a flexible manufacturing process that also allows persons with disability to manufacture the mobility device in four standard sizes. The PDTs facilitated the entire product development process, which includes conceptualizing the idea, manufacturing of the product and creating a corporate identity and branding.

Client: Schalk van der Merwe – Disabled Entrepreneur



APPLIED RESEARCH AND INNOVATION

7 of 7

3D PRINTED IMPLANTS MANUFACTURED AT CUT



THANK YOU

GET IN TOUCH

Office of the Vice-Chancellor and
Principal

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vc@cut.ac.za

Thinking Beyond



Central University of
Technology, Free State

