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UNIVERSITEIT van WES-KAAPLAND

UWC

How We Got Here

From 'Bush College' to Global University
1959 — Present

1959 — 1970 — 1975 — 1982 — 1990s — Today

Presented at the COO HEFMA Forum | March 2026

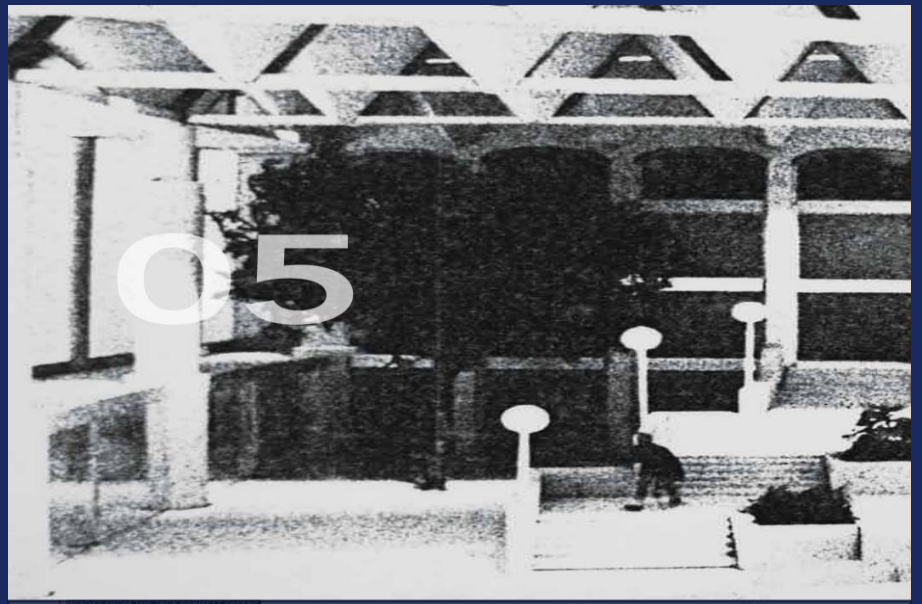
Born Under Apartheid

1959 – 1969

In 1959, Parliament established the University College of the Western Cape for people classified as Coloured — offering limited training for lower to middle-level roles.

The first 166 students enrolled in 1960. The campus was built on a treeless wetland on the Cape Flats, deliberately isolated and inferior.

> *A bush college -- a university without autonomy, physical development controlled by the Public Works Department.*
>
> Julian Elliott, UWC Development Plan 2010



Early UWC campus — Images from the Jack Barnett Papers

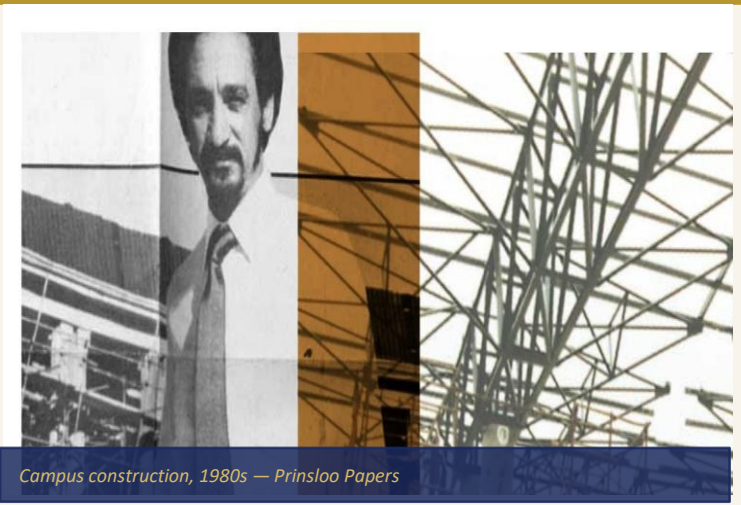
1959
Legislation passed

166
First students, 1960

1970
Full university status

Intellectual Home of the Left

1975 – 1990



Campus construction, 1980s — Prinsloo Papers

1975

First Black Rector

Richard van der Ross appointed. UWC begins asserting its own identity and pursuing autonomy from government.

1982

Rejection of Apartheid

UWC formally and publicly rejected apartheid, cementing its commitment to social justice and free inquiry.

1983

Full Autonomy Granted

UWC gains institutional independence, free from apartheid government control for the first time.

Under Rector Jakes Gerwel, UWC embraced Peoples Education and radical campus redesign, transforming from a bush college into a beacon of resistance.

New signature buildings commissioned from Cape Town's leading architects gave the campus a civic grandeur to match its political identity.

The Campus Reimagined

1980s Urban Design Vision

Architect Jack Barnett, commissioned in 1980, envisioned a Students Union that evoked the atmosphere of a Greek Agora -- a space of free exchange and civic grandeur.

Key Architects

- Jack Barnett
- Ivor Prinsloo
- Roelof Uytenbogaardt
- Julian Elliott
- Julian Cooke

A new order

THE South African Left needs an intellectual home — and the University of the Western Cape, now in the process of fighting and forging an identity for itself, might be just the place.

As with many other newly designated Group Areas, UWC was built on land that was environmentally inferior to other parts of Cape Town. It was a treeless wetland area exposed to harsh winds and sun, and known as the 'bush', later to become the Cape Flats Nature Reserve. The establishment of the Flats as a balkanised dumping ground for people after forced removals was also a function of the rapid growth of population, including continued migration to the city of people from small towns and rural areas in what was then the Cape Province.

The objectification and figuration of UWC as a new master planning exercise in the 1980s was not unique. A number of South African practitioners in the spatial design disciplines had studied in the USA in the late 1970s and early 1980s. They had brought back the idea of urban design as a new form of spatial planning practice and had begun to develop new visions for late-apartheid spaces in the city.[11] Projects were developed for sites across the range of spaces declared in white group areas, townships, and homelands and in Cape Town on the Cape Flats.[12] Precisely engaged beyond the two-dimensional approach of city planning, urban designers sought to design space in three dimensions, thereby giving form to spatial projects on a scale beyond the building as object.

In addition, across South Africa campus design was being rethought and new ideas were mapped onto both old and new university spaces using this international precedent.[13] Julian Elliott returned in 1969 from designing campuses in Zambia to work for UCT and was a planner for the award winning but subsequently disputed diagonal plan for the Middle Campus at UCT.[14] Returning from the University of Pennsylvania, Willie Meyer and partners landed commissions through their Broederbond connections and constructed the Kahnian-inspired Rand Afrikaans University and the University of the Transkei in Umtata (now Mthatha).[15] And at UWC, Jack Barnett, Reg Patterson, Ivor Prinsloo, Julian Cooke, and others who had collaborated on the Rand Mines Properties project in Johannesburg regrouped to put their minds to reconfiguring the 1960s plan at UWC.[16]

In this move away from the making of purely architectural space (that of buildings alone) to the arena of planning and urban design, the interventions, when read in their

65

Construction on the UWC campus, 1980s -- Images from the Jack Barnett Papers (UCT Manuscripts & Archives)

From Struggle to Impact

1990s – Present

UWC students today -- University of the Western Cape

Lauded by President Mandela, UWC emerged as a national asset -- pivotal in post-apartheid policy and governance. Today it is a leading research university with a Vision 2035 to achieve global recognition.

25 370	7	15+	30+
Students	Faculties	SARChI Chairs	Partner nations

1990s

National Asset

Praised by President Mandela; central to democratic governance

2000s

Research Growth

SARChI Chairs, international partnerships, curriculum expansion

2035

Vision 2035

Recognised as a globally leading research university

THE ROAD AHEAD

Making a Difference

From Hope to Action Through Knowledge

RESEARCH

African-led research tackling urgent challenges from public health to hydrogen energy

ACCESS

Expanding access to higher education for students from underserved communities

IMPACT

Graduates and alumni making a difference across South Africa and the world

www.uwc.ac.za

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UWC

South Campus Education Precinct

Faculty of Education · Design Development
GAPP Architects & Urban Designers | March 2026

Prepared by GAPP Architects & Urban Designers | University of the Western Cape

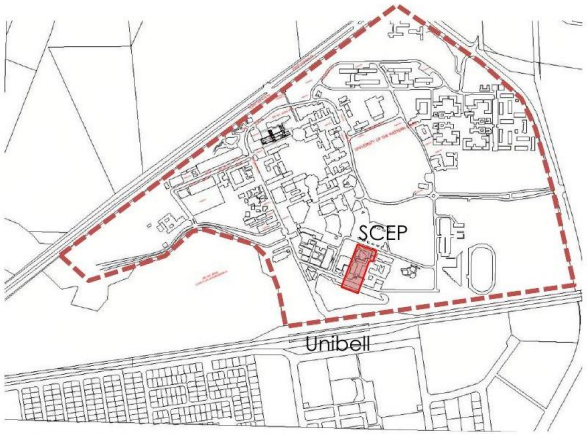
1980s Buildings | Strategic Brief | 2017 Concept | Refurbishment | Completed 2022 | Students 2023

Project Context

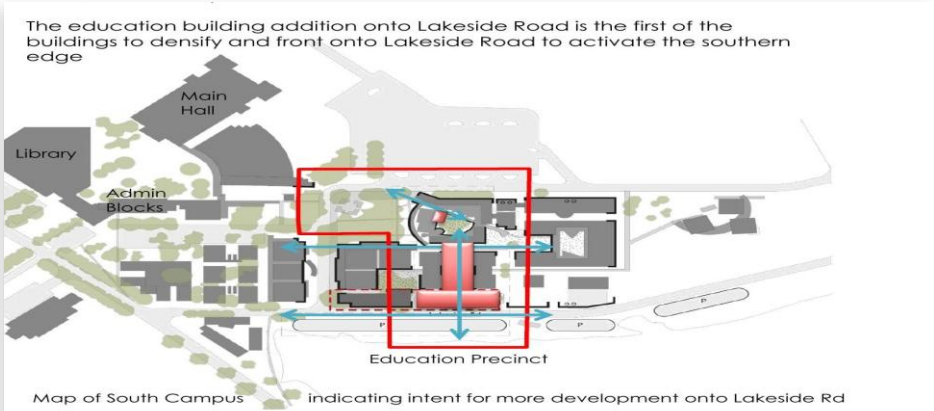
Strategic anchor for the South Campus 'living and learning' zone

green hub.

Its location provides excellent accessibility for commuting students due to its proximity to the Unibell Railway Station, effectively linking the Faculty's mission of social transformation with the physical infrastructure of the surrounding community.



UWC Bellville Campus Plan — SCEP site highlighted



South Campus map — Education Precinct location & connectivity

- Living & Learning Zone — Consolidates teacher training from dispersed 1960s blocks into a centralised, state-of-the-art green hub adjacent to Unibell Residence.
- Rail-Connected Access — Proximity to Unibell Railway Station provides excellent commuter access — linking social transformation with physical community infrastructure.
- Lakeside Road Gateway — First building to front onto Lakeside Road, activating the southern edge and signalling intent for ongoing south campus densification.

From Derelict to State-of-the-Art

1990s Buildings → Modern Education Hub

The vacated Chemical Sciences and Computational Sciences buildings (built 1990) had suffered vandalism, theft, and severe water ingress. A full condition assessment was carried out and refurbishment was completed to current regulatory standards.

Led by GAPP Architects & Pure Design Interiors — the first UWC project to integrate interior designers from the very start of design development — the Education Precinct was completed in 2022 and opened to students in 2023.

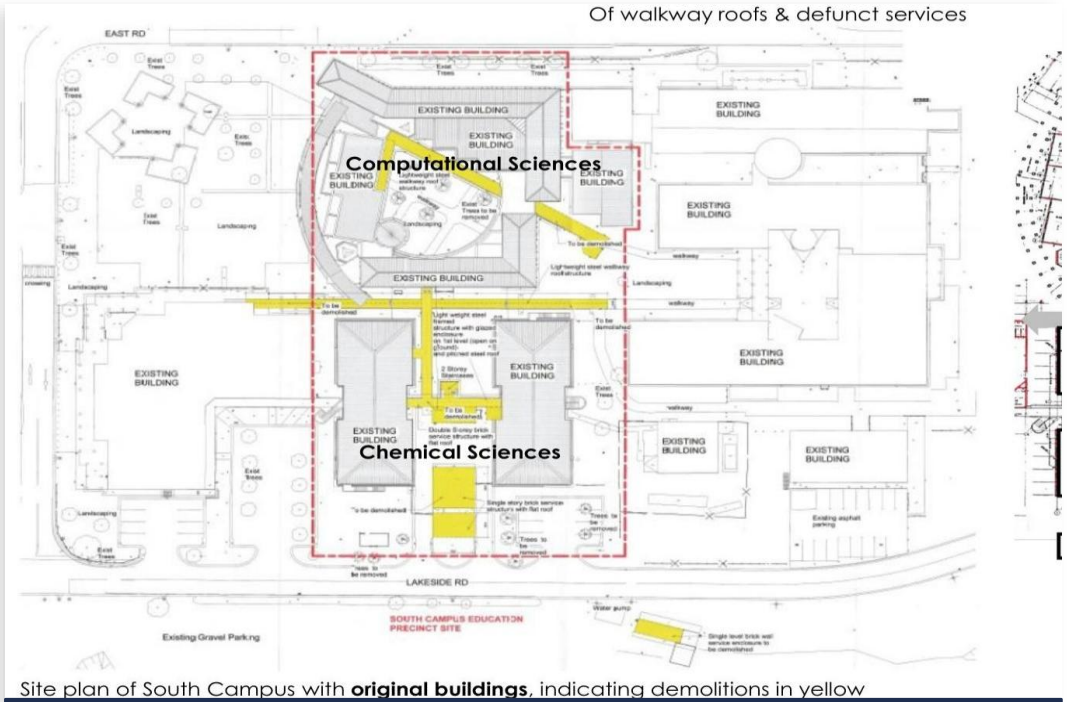
Architects: GAPP · Interiors: Pure Design · Completed: 2022 · Occupied: 2023

Original isometric view of the 1980s buildings — pre-refurbishment

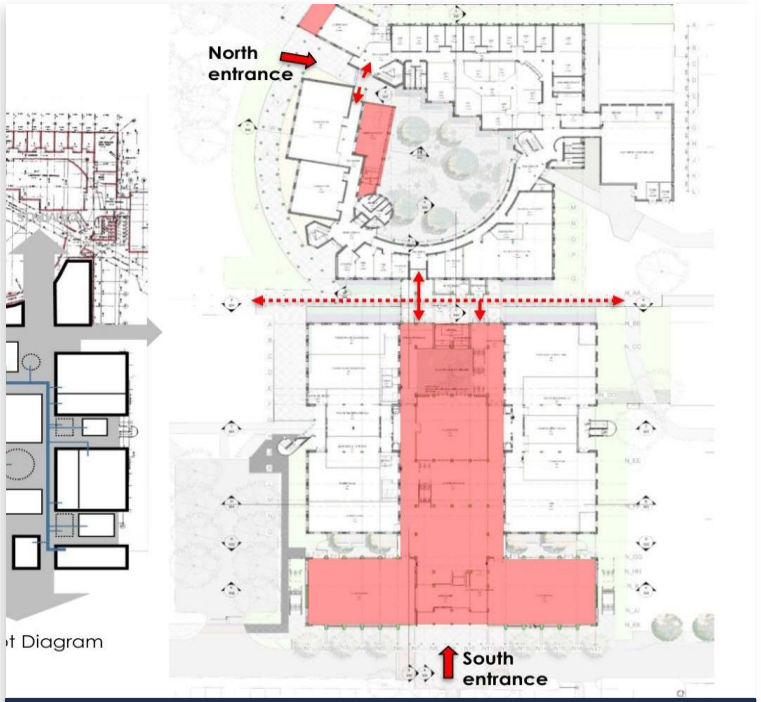
Concept model — May 2017

Design Response

Site plan, concept diagram & ground floor plan



Site plan — original buildings, demolitions (yellow) & south campus precinct boundary



Ground floor plan — new Education Precinct (additions in pink)

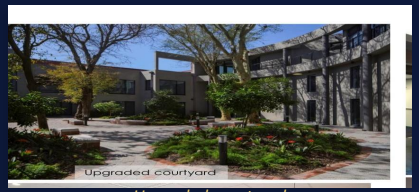
Northern Block & Activated Courtyard

Ex-Computational Sciences Building — refurbished in-envelope

The northern block was refurbished within the existing envelope. The semi-circular courtyard — previously a security-risk thoroughfare — was transformed into a protected outdoor break-out space, accessible from within the faculty and visible from upper levels.

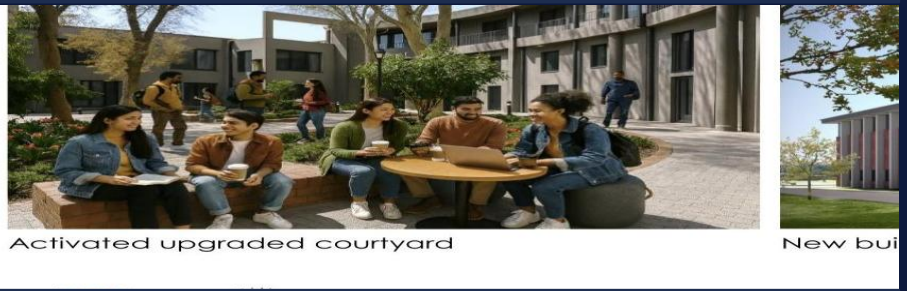
A coffee shop was added to the north-western corner to serve the faculty and the wider campus, creating a focal social feature.

Before



Upgraded courtyard

3D aerial render — northern block & south precinct



Activated courtyard — social learning outdoors

Lakeside Road frontage — activating the southern edge

The Triple-Volume Atrium

Heart & identity of the Education Faculty Precinct

Section through South block — Classrooms / Atrium / Open Courtyard / Social Learning

New building onto Lakeside Road — South block exterior

The atrium ties two blocks of the ex-Chemical Sciences buildings together, providing vertical movement via open staircases rising through three open-plan social learning levels. It provides a dramatic central space forming the heart and identity of the Education Faculty Precinct.

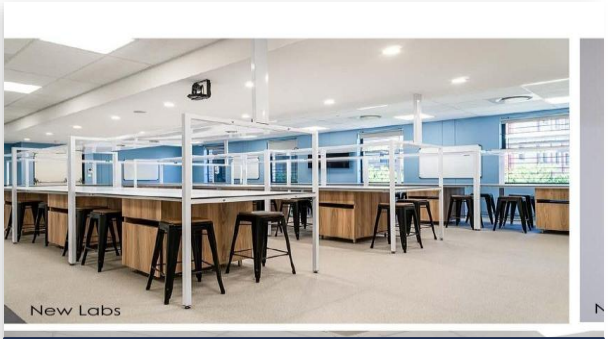
The first floor is the primary connecting level between all buildings. Clear visual connections across all levels establish a unified faculty identity — a key priority from the Strategic Brief.

Activated triple-volume Atrium — social learning & circulation

Transformation — Teaching Spaces

From derelict labs to flexible, technology-enabled learning venues

Before — Chemical Sciences Labs



New Labs — ergonomic, adaptable fit-out

New specialist & social learning spaces

Before — South facing (no entrance)

New teaching venues — hybrid-ready

New atrium social learning levels

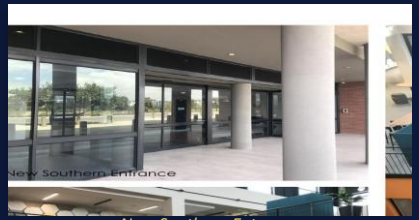
Atrium & Entrance Sequence

From service yard to civic gateway

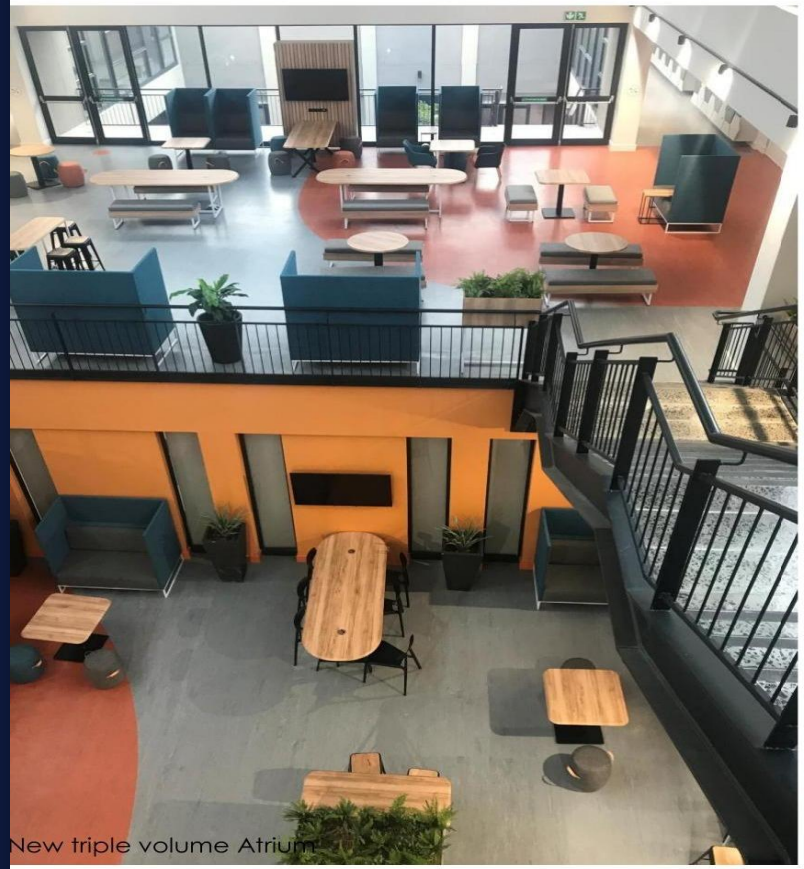
The south-facing service area — once without an entrance — was transformed into a dramatic new southern gateway onto Lakeside Road. Between two existing blocks, the chemistry courtyard became a vibrant triple-volume atrium with open staircases, social seating and hexagonal feature wall tiles.

The atrium establishes a strong, visible Faculty identity on campus.

Before — south facing



New Southern Entrance



New triple-volume Atrium — heart of the Education Faculty Precinct

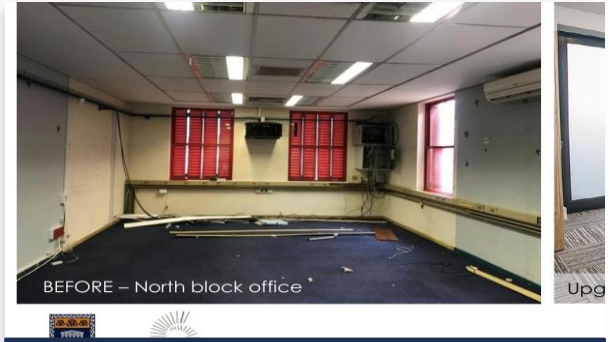
Offices & Courtyard

Northern block upgrade — light, connectivity & collaboration

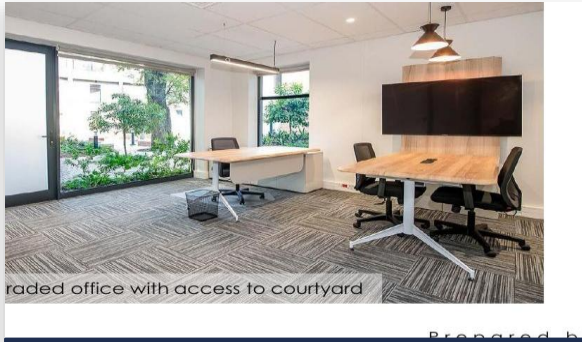
Before — thoroughfare courtyard

Upgraded courtyard — landscaped breakout space

North block — upgraded atrium, open to offices



Before — North block office (derelict)



Upgraded office — courtyard access & daylight

New lecture hall — hexagonal feature wall

A New Standard for Education

The South Campus Education Precinct sets a new benchmark for collaborative, innovative higher-education architecture in South Africa. It demonstrates how thoughtful refurbishment and purposeful design can breathe new life into neglected infrastructure while elevating the student experience.

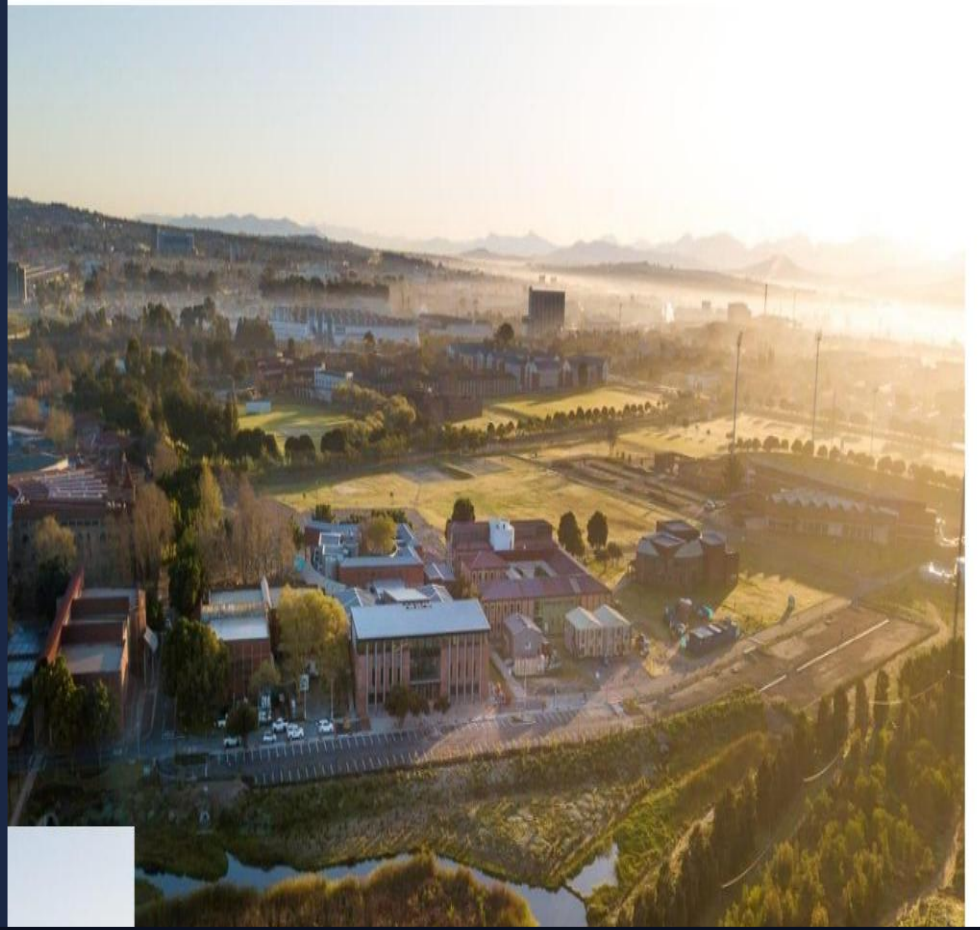
The result is a vibrant, technology-enabled Faculty of Education — a civic landmark on the southern edge of the UWC campus.

01 3 Buildings Integrated — Computational & Chemical Sciences unified into one Faculty hub

02 Completed 2022 — Delivered on programme; students in occupation from 2023

03 Hybrid Learning Design — COVID-informed flexible spaces, AV/ICT-integrated throughout

04 Collaborative Delivery — First UWC project with interior design integrated from day one



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School of Pharmacy Refurbishment & Extension

Design Development | GAPP Architects & Urban Designers | March 2026

Established in 1962, UWC's School of Pharmacy is the sole provider of pharmacy training in the Western Cape. The existing building — designed for 30–40 students — now accommodates 120–150 students per year group, creating critical infrastructure challenges.

Obsolete	Congested	Non-Compliant
1980s infrastructure	3-4 x student overload	Pharmacy Council risk

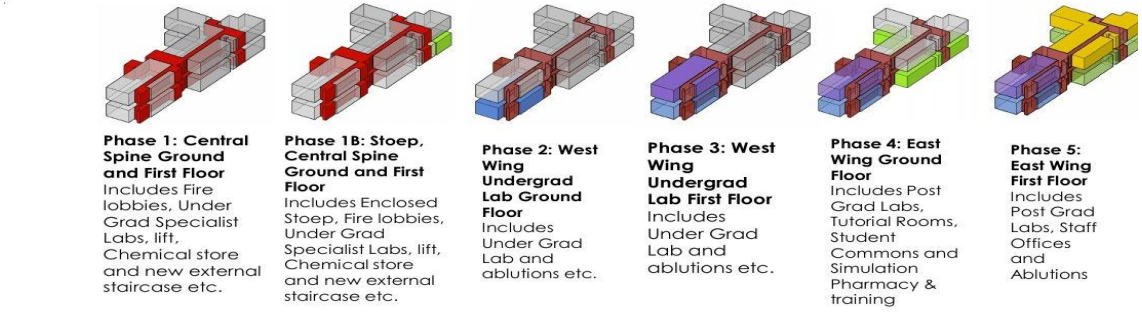
Phase 1B: New main entrance & universal access — GAPP Architects

Phase 1B: Students outside the School of Pharmacy — GAPP Architects

Design Response & Phased Delivery

Architect: GAPP Architects & Urban Designers | Category 5 Refurbishment

Phase 1B: Landscaped courtyard — GAPP Architects



6-phase implementation approach — building remains operational throughout

Phase 1B: Landscaped walkway — GAPP Architects

Integration

Unified facility: staff offices, research labs and tutorial rooms under one roof.

Compliance Upgrades

Category 5 refurbishment — fire safety, universal access, air quality & Pharmacy Council standards.

Capacity Expansion

Accommodate 120–150 students per year group across undergrad and postgrad programmes.

09 / LAW FACULTY PROJECT

New Faculty of Law at UWC

Former Education Building — Repurpose & Refurbishment

Repurpose the Old Education Building into offices, learning and research facilities for the Faculty of Law, combined with refurbishment of the existing Law Building and a new Skybridge link connecting the two.

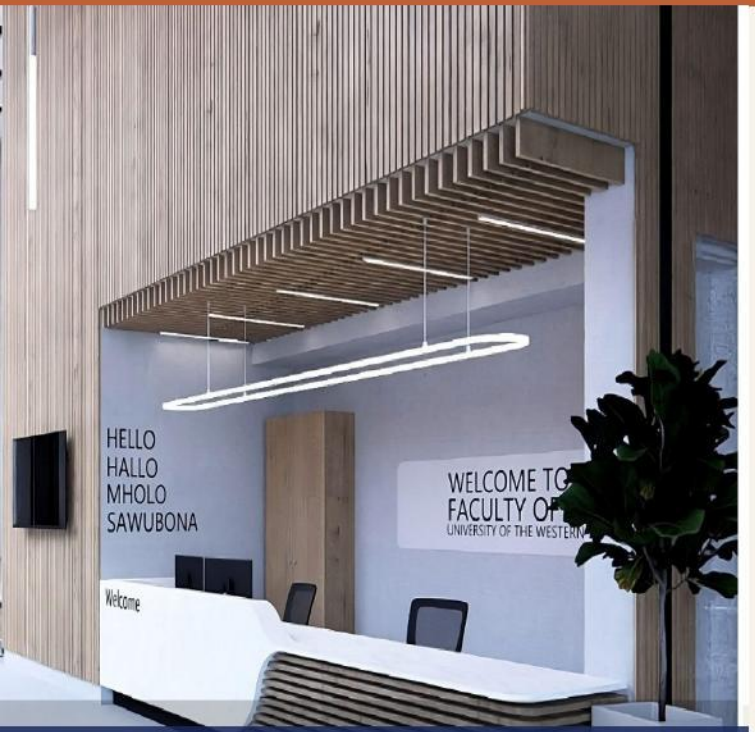
1. New entrance & urban design
2. Courtyards + Skywalk bridge
3. Universal access throughout

Existing Education Building — Denzil Coetzee Architects

New Faculty of Law entrance render — Denzil Coetzee Architects

Design Vision & New Law Precinct

Architect: Denzil Coetzee Architects



Faculty of Law reception interior render — Denzil Coetzee Architects

New Law Precinct Plan — consolidating Faculty of Law buildings

4 Internal Spaces

Modernise interiors. Generic tutoring, seminar & meeting rooms for multiple users.

5 Collaborative Learning

Informal student study, personal workspaces and academic engagement areas.

6 New Law Precinct

Consolidate learning and admin faculties into one unified Law Precinct.

✓ Architect

Denzil Coetzee Architects
denzilc@mcarc.co.za
021-493 3617

07 / SENATE PROJECT

Senate Refurb & Archive Building

PROJECT BRIEF

Preservation of precious artefacts and engagement with content for students and the public through adaptive re-use of the existing Senate Hall building.

The project involves refurbishment of the Senate Hall, construction of a new Archive and Library building, and landscaping of the entrance plaza.

CHR	DRAMS	RIM
Dedicated offices	Dedicated offices	Dedicated offices

UWC artefact collections — dhk Architects

New Library and Archival Sheds — dhk Architects, March 2026

Project Components & Design Vision

Architect: dhk | March 2026

New Approach View — Senate Hall Refurbishment | dhk Architects

The new building completes the open entrance plaza, with the existing Senate Hall housing offices and exhibition areas, and the new structure providing archive and library space.

Alterations & Refurb

920m² alterations + 515m² refurb. Open-plan workspaces, glazed walls for visibility, refreshed finishes and improved technology.

Archive

1 951m² provided of 3 625m² requested. Archival and processing facilities for collections. Public engagement and display areas.

Processing & Resource Centre

300m² shared facility for CHR, DRAMS and RIM stakeholders. Dedicated exhibition areas and seminar rooms.

Landscaping

4 210m² new landscaping. Entrance plaza/courtyard for staff, events and socialisation. Enhanced arrival experience.

Water Treatment

Infrastructure Plant

2017	2018	2020	2023	2026
Day Zero Initiative	Borehole Plant Online	AWG Plant Commissioned	Process Optimisation	Report Date

Campus Water Security

Two integrated water generation systems ensuring UWC's independence from municipal supply constraints.

500 000 L / day capacity

2 000 L / day from AWG

4 Boreholes on campus

Borehole Water Treatment Plant

2017 – Ongoing | Bellville Main Campus

In response to Cape Town's 2017–2018 "Day Zero" drought crisis, UWC initiated a groundwater extraction and treatment project to secure campus water supply and reduce reliance on the City's strained municipal network.

Borehole Water Treatment Plant — UWC Campus Entrance

Bulk Water Storage Tanks — 500 000 L/day capacity

Treatment Process

Multi-Stage Purification System

Extracted groundwater passes through a rigorous multi-stage treatment train — equalization, multimedia filtration, triple-stage reverse osmosis and ultrafiltration — before entering bulk storage for campus distribution.

Multi Media Filtration — filter vessels

Reverse Osmosis — 3-stage membrane array

Ultrafiltration — UF membrane modules

04 / WATER TREATMENT PLANT

AWG Plant Administration Building

Operational – Ongoing | East Wing Supply

The AWG plant draws ambient air through fans and filters, cools it to dew point to condense moisture, then treats the collected water through filtration and UV sterilisation before storing in a 10 000 L tank for East Wing distribution.

AWG Unit — Administration Building, UWC Campus

10 000 L Storage Tank & Pump Station — East Wing Supply

Outcomes, Challenges & the Road Ahead

OUTCOMES

- Campus water security achieved — independent of municipal supply during drought events
- 500 000 L/day borehole capacity + 2 000 L/day AWG supplementary supply
- Potable water quality through MMF, 3-stage RO, UF and UV sterilisation
- Reduced utility costs through diversified supply

CHALLENGES

- Groundwater quality variability — ongoing monitoring required
- High-pressure RO energy costs
- RO membrane replacement and maintenance expenses
- AWG output dependent on ambient humidity

ROAD AHEAD

- Phased maintenance schedule to minimise operational downtime
- Controlled abstraction to ensure sustainable aquifer yield
- Explore solar integration to reduce RO energy costs
- Investigate expanded AWG capacity across additional buildings

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Solar PV & BESS

Option 1 — Maximize Southern Carports
Revised Proposal R3 · Henry Fagan

3,532 kWp · Recommended Option

Tender — Option 1 — Award — Construction — BESS — Operation

Why Option 1?

The smart, low-risk path to campus energy independence.

UWC faces rising energy costs, load-shedding disruptions, and growing sustainability commitments. Option 1 addresses all three — efficiently, reliably, and with zero remedial cost — by deploying 3,532 kWp of solar PV across four existing southern carport zones.

Solar carport array — existing parking converted to energy generation

"Option 1 provides the strongest alignment between system performance, capital efficiency, operational practicality, and long-term value."

Henry Fagan Consulting Engineers & Project Managers

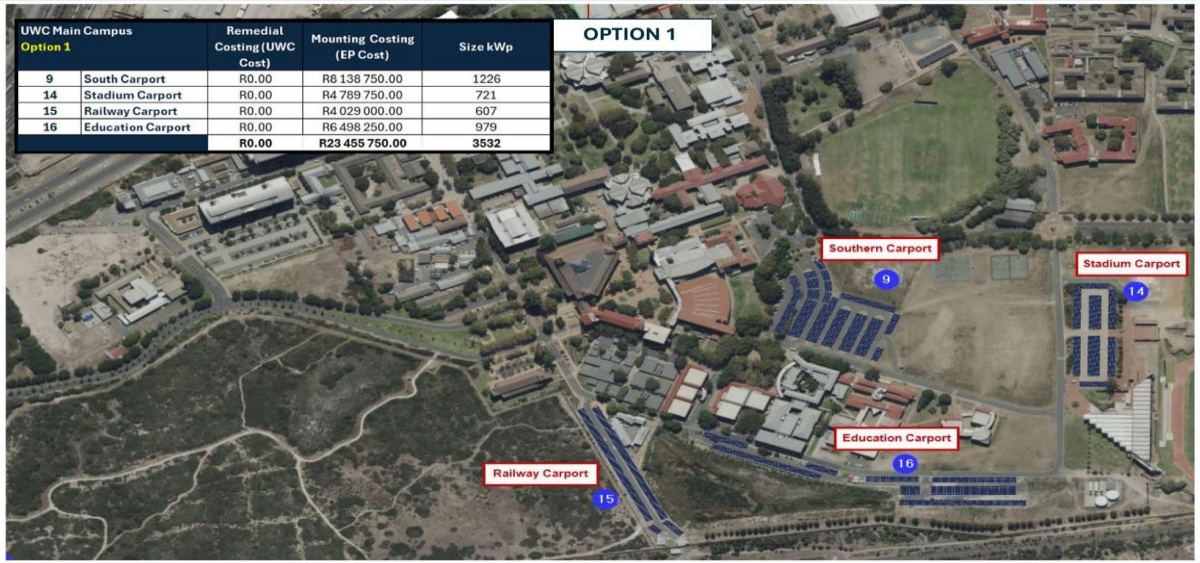
3,532	Ro	Low
kWp Capacity	Remedial Cost	Disruption Level

Option 1 — Four Carport Zones

OPTION 1

Note: Values are indicative for presentation purposes and would change once the final layout is confirmed

UWC Main Campus Option 1		Remedial Costing (UWC Cost)	Mounting Costing (EP Cost)	Size kWp
9	South Carport	R0.00	R8 138 750.00	1226
14	Stadium Carport	R0.00	R4 789 750.00	721
15	Railway Carport	R0.00	R4 029 000.00	607
16	Education Carport	R0.00	R6 498 250.00	979
		R0.00	**R23 455 750.00**	**3532**



HENRY FAGAN
Consulting Engineers & Project Managers

** Values indicative — subject to final layout confirmation*

9 — South Carport
1,226 kWp · R8 138 750

14 — Stadium Carport
721 kWp · R4 789 750

15 — Railway Carport
607 kWp · R4 029 000

16 — Education Carport
979 kWp · R6 498 250

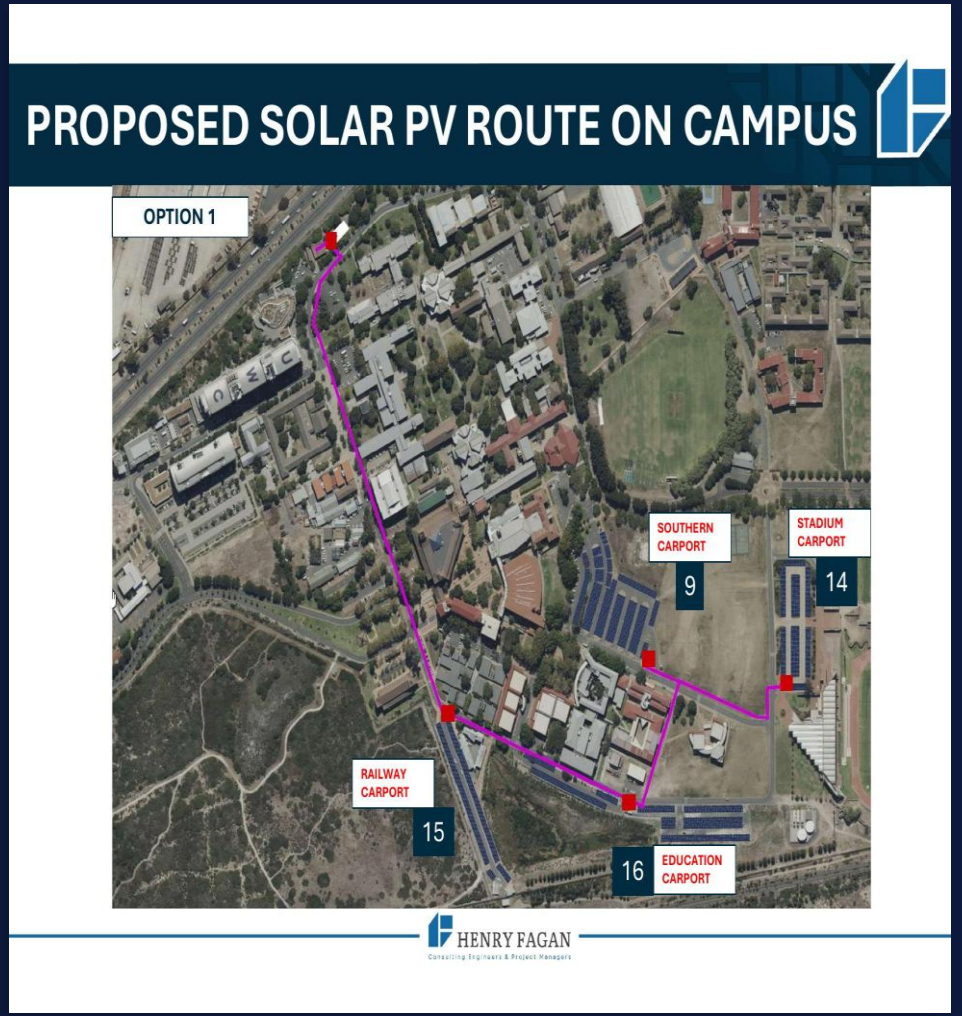
TOTAL · 3,532 kWp · R23,455,750

Proposed Solar PV Route on Campus

Option 1 — Simpler MV Integration

The MV cable route (shown in magenta) connects all four southern carport zones to the campus main switchboard via a single, efficient corridor. Carports are deliberately positioned close to the main MV route, minimising trenching costs and installation complexity.

- Single MV route — lower cabling CAPEX
- Minimal trenching through built areas
- Shorter installation timeline
- Avoids academic building interference



Solar PV System Benefits

Solar PV in action — clean, predictable, campus-scale generation

Cost Reduction

Significant electricity savings across a 20-year system lifetime

Clean Energy

Zero emissions at point of generation — reduces UWC's carbon footprint

~3,000 Sun Hours

Cape Town's climate ensures consistent, predictable annual yield

Asset Utilisation

Existing carport structures converted into productive energy assets

EV Charging Ready

Infrastructure supports future EV charging station integration

Grid Independence

Reduces exposure to Eskom tariff hikes and load-shedding

3,532 kWp across 4 zones · R0 Remedial Cost · Low Disruption · ~20yr Lifespan

Battery Energy Storage System

Resilience · Peak Shaving · Solar Optimisation

The BESS pairs with the solar PV array to store surplus daytime generation, dispatch power during peak tariff periods, and maintain critical campus operations through load-shedding events.

BESS containerised unit — solar + storage integration at point of generation

Resilience

Backup Power

Powers critical campus loads during grid outages and load-shedding

Savings

Peak Shaving

Discharges during peak tariff periods to cut Eskom demand charges

Stability

Solar Optimisation

Smooths intermittent solar output for stable, maximised yield

Solar PV + BESS = a complete on-site energy ecosystem: generation, storage, and intelligent dispatch — all without remedial cost or operational downtime.

Option 1 — Pros & Cons

Pros

- Lowest complexity — large, uniform carport areas
- Zero remedial cost — no building downtime
- Improved energy yield from carport orientation
- Simpler MV routing — carports near main grid
- Lower long-term maintenance cost
- More predictable execution timeline
- Reduced total CAPEX vs. alternatives

Cons

- Underutilises some available campus PV potential
- Temporary parking disruption during construction

The two cons are minor and manageable. The parking disruption is temporary and confined. The campus PV potential trade-off is outweighed by the significant savings in cost, time, and complexity.

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Thank you