



CPUT Cape Peninsula University of Technology

SU Stellenbosch University

UCT University of Cape Town

UWC University of the Western Cape

World-class education

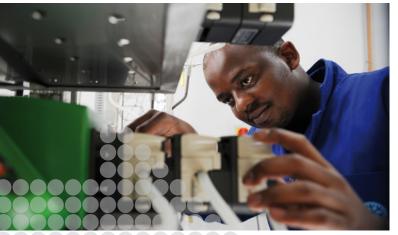
Four of South Africa's leading universities - the Cape Peninsula University of Technology (CPUT), Stellenbosch University (SU), University of Cape Town (UCT) and University of the Western Cape (UWC) — are located in the Western Cape. Together they enrol over 94 000 students on campuses spread across the Province. The four universities offer a wide range of accredited undergraduate and postgraduate programmes in all major fields of study, as well as continuous professional development opportunities.

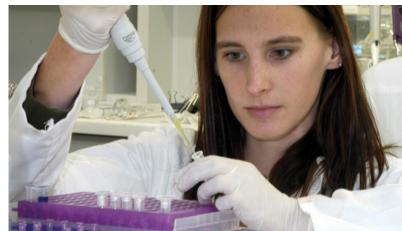
The Western Cape has two medical schools, a dental faculty, two business schools, and an opera school. There are academic opportunities in diverse fields such as forestry, the performing and fine arts, dance, design, viticulture, astronomy, nuclear engineering, tourism and heritage studies, amongst the more usual university offerings. The universities all have extensive research agendas and are among the top research universities of the country. They also have comprehensive library holdings and Information Technology infrastructure.

Research and innovation

In addition to the four universities, a number of leading research institutes and centres as well as academic hospitals are located in the Western Cape. These include the iThemba Laboratory for Accelerator Based Sciences, Medical Research Council, Centre for High Performance Computing, South African Astronomical Observatory and the South African National Biodiversity Institute. Together they provide an excellent infrastructure for research and innovation. The region is home to a large number of scientists who are "A" rated by the National Research Foundation (NRF). These are leading internationally acclaimed scholars known for the high quality and impact of their research output. Western Cape universities have also been awarded 39 research chairs by the NRF under the South African Research Chairs Initiative (SARChI). The universities also host a number of national Centres of Excellence.

The four universities and the extensive network of research institutes and centres in the Western Cape form the core of a growing and dynamic science, technology and innovation system in the Western Cape. The universities also have a wide range of initiatives that address the developmental challenges that face the region and country. Social responsiveness has long been part of the ethos of the universities and is supported formally in curricula, research contracts and a broad range of partnerships, as well as informally in a wide variety of student and staff initiatives.





A tradition of excellence

The Western Cape attracts students from all over South Africa, the Southern African region, the rest of Africa and internationally. 10 percent of the student body in the Western Cape is made up of international students, who are attracted to the region, not only by the high international standing of the universities, but also by the natural beauty and vibrant cultural and social life of the Western Cape. Students enjoy the use of a wide range of sporting and other recreational facilities and many are actively involved in student organisations that have a rich history of contributing to the social development of communities in the Province.

Promoting excellence in teaching and learning remains a key priority for the universities in the region, all of which continuously strive to enhance the quality of student academic and social life. All the universities have established units to promote and expand the contributions of higher education to addressing the development challenges facing the country and the Continent more broadly.

Collaboration and participation

All four universities have a wide range of partnerships with universities across the globe. Locally, the universities have established the Cape Higher Education Consortium (CHEC), which promotes collaboration amongst the four members as well as having partnerships with the Provincial Government of the Western Cape, City of Cape Town and other key stakeholders in the region, such as business and industry. These partnerships are designed to support the economic and social priorities of the region through strategic teaching, research and development interventions.

All of the universities are lively academic institutions, each offering its own unique campus culture with institution-specific traditions, bringing together many different cultures. Students are offered a wide range of activities to participate in, including sports, culture, politics, religion, and relaxation.





Key information on higher education in the Western Cape (2009)

73 049

3 037

Undergraduate students

Academic staff

10 230

9 858

Master's students

International students

2 558

PhD students



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CPUT Cape Peninsula University of Technology



2005

743

125

715

Institutional profile

The Cape Peninsula University of Technology (CPUT) was established on 1 January 2005 when the Cape Technikon and Peninsula Technikon merged. This was part of a national process of transforming the higher education landscape in South Africa. The history of CPUT is, therefore, the history of the two merged institutions and goes back to 1920 when the foundation stone of the Longmarket Street Building of the then Cape Technical College was laid in Cape Town. The Peninsula Technical College was established in 1962 and in 1967 the College relocated to its Bellville campus. After the promulgation of the Technikons Act in 1976, technical colleges were able to offer tertiary education in selected fields of study. During 1979 both colleges were legally established as technikons and from 1993 they were empowered to offer degrees: Bachelors, Master's and Doctoral degrees in Technology.

The Cape Peninsula University of Technology is the only university of technology in the Western Cape and is the largest University in the region. The University has six faculties focused on Applied Sciences, Business, Education and Social Sciences, Informatics and Design, Engineering and Health and Wellness Sciences. The institution is making excellent progress in strengthening its research capacity with the awarding of an increasing number of postgraduate degrees and now has one B-rated researcher and 12 other rated researchers. The University also plays a leading role in the provision of service-learning opportunities for its students.

The University offers more than 80 career-focused courses and has infrastructure that includes, apart from the two main campuses in Bellville and Cape Town, the Granger Bay Campus with a hotel school and restaurant next to the world-renowned V&A Waterfront in Cape Town as well as various campuses in Mowbray, Wellington and the two major hospitals in the region.

Collaborative research agreements exist between CPUT and various universities in India, Europe, USA, Russia and China, amongst others, as well as leading South African universities. The University's research culture and history spans almost two decades and focuses on applied and problem solving research which is responsive to regional, national and Continental needs.

CPUT is currently recognised by the NRF for excellence in research in the following areas:

- Instrumentation Research
- Computational and Applied Technologies in Manufacturing
- Environmental Toxicity and Remediation
- Material Science and Technology
- ICT in e-Business, e-Government and Community Engagement
- Real-time Distributed Systems
- · Work-Integrated Learning Research



GENERAL INFORMATION Founded: Undergraduate students: 29 021 Master's students PhD students International students 2 282 Academic staff: Faculties:

Applied Sciences Education and Social Sciences Health and Wellness Sciences Informatics and Design

- The East City Design Initiative (ECDI) is a stakeholderdriven initiative managed by the Cape Town Partnership, with the full participation of the Faculty of Informatics and Design. The ECDI aims to establish a design precinct in the east of the Cape Town central city, which will showcase design excellence, incubate emerging talent and nurture innovation.
- The Centre for Instrumentation Research specialises in wireless networks, sensors and high-frequency electronics and works in close collaboration with the Universities of Cape Town and Stellenbosch.
- Computational and Applied Technologies
 Manufacturing is a niche area that explores the
 use of computational techniques for the simulation
 of mechanical engineering problems along with
 the application of advanced technologies to solve
 engineering problems.
- The Environmental Toxicity and Remediation research niche area is based on two themes: the assessment, through monitoring and modelling, of exposure to environmental toxicants, and the development of remedial technologies.
- The Institute of Material Science and Technology's
 activities focus on how materials deform and flow. The
 Institute has produced internationally-cited research
 in such diverse areas as emulsion technology and
 environmentally superior waste disposal practices. A
 study on high concentration suspension pumping with
 the Australian Mineral Industrial Research Association
 has helped mines to save energy and pump less water
 onto waste dumps, thereby reducing leaching and
 promoting rehabilitation.
- The Centre for Real-Time Distributed Systems concentrates on the development of novel models, design methods, software, hardware, and their integrated application to real-time distributed systems.
- The Work-Integrated Learning Research Unit has as its research focus the human, social, organisational, and work dimensions of knowledge production and use within and across diverse contexts in higher education. Current projects include ethnographic studies of engineers and radiographers in work and

- academic environments, school-based practices, work-based higher degrees, higher education and community engagement, and vocational pedagogies.
- The Centre for Distributed Power and Electronic Systems focuses on energy efficiency, infrared application, distributed system and energy sensor technologies.
- The Centre for Tourism Research in Africa highlights CPUT's contribution to tourism and hospitality teaching and research. The Centre brings together researchers and other role-players in the Western Cape in order to find answers to applied research questions whilst also fostering research on African tourism development and contact between tourism research centres and individuals across the Continent.
- The Centre for Wireless Application and Integration underpins the Department of Electrical Engineering's research activity in wireless technology, and covers radiation studies, electromagnetic compatibility, microwave communication systems, antennas and wireless sensor networks.
- Research at the Crystal Engineering Unit is concerned with the structure and reactivity of selected organic compounds.
- The research priorities of the Energy Institute include finding solutions to the power crisis in South Africa by promoting energy efficiency. Various cost- and energy-saving devices have been developed, tested and patented to support South Africa's Demand Side Management and Energy Efficiency programmes.
- The French South African Institute in Electronics
 (F'SATI) programme is the result of an agreement
 between CPUT, Tshwane University of Technology
 and Groupe Ecole Supérieure d'ingénieurs en
 Electrotechnique et Electronique (ESIEE) in Paris that
 makes provision for the presentation of the ESIEE
 MSc in Electronic Engineering at CPUT, simultaneously
 with the CPUT MTech in Electrical Engineering.
 F'SATI also offers a postgraduate programme in
 Satellite Engineering.
- The ICT Academy promotes innovative education and training in Information and Communication Technologies, with particular focus on Internet technology skills.
- The Oxidative Stress Research Centre focuses on the role of oxidative stress in health and disease

- development through high-quality research.
 The Centre's research thrusts include: experimental biology; South African medicinal plants; obesity and chronic diseases of lifestyle; bio- and inorganic materials; and analytical laboratory services.
- Radio Chemistry and Ion Exchange Chromatography
 The core areas of research include radiochemical
 separations of radioisotopes from each other and
 from the target material, and the labelling of organic
 compounds with specific radioisotopes for use in
 nuclear medicine and cancer therapy. A collaboration
 between CPUT and the Institute of Chemistry Timisoara
 of the Romanian Academy forms part of the South
 Africa Romania Bilateral Agreement on Science and
 Technology Cooperation and focuses on polyphosphonic
 acid polymers.
- The South African Built Environment Research Centre's core areas of research include construction health and safety, construction education, and construction industry development. The Development Bank of Southern Africa has partnered with the Centre in a research project to design and test a model for the empowerment of women in the construction industry.
- The Agrifood Technology Station provides an affordable range of technological services to the agricultural & food processing industries, with a view to improving standards, competitiveness, innovation and R&D capacity.
- The Technology Station in Clothing and Textiles
 provides support to SMMEs in the clothing and textile
 industries, including production process consulting,
 quality and product testing, training and product
 development and research.

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SU Stellenbosch University



Institutional profile

Nestled among picturesque mountains in the heart of the Cape Winelands, Stellenbosch University (SU) offers a stimulating academic environment, a vibrant student life and a preferred sporting and cultural destination.

With origins dating back to 1866, the institution acquired university status in 1918 and now is recognised as one of the top research-intensive universities on the African continent. The University has the highest research output per academic staff member in the country, as well as one of the highest percentages of postgraduate students. In addition, it has South Africa's second highest number of researchers rated by the NRF, with the highest number for the human sciences.

The University has taken the bold step of aligning its research, academic and community engagement initiatives with five key international development themes: eradication of poverty and related conditions; promoting human dignity and health; promoting democracy and human rights; promoting peace and security; and promoting a sustainable environment and a competitive industry.

Giving shape to this ambitious endeavour is a strategic initiative according to which the University will harness its academic strengths and research excellence to solve some of the most pressing challenges facing the country and the Continent. This is in addition to ongoing internal objectives such as an even higher academic success rate and improved accessibility for disadvantaged students to create a more diverse student population.

Stellenbosch University has 270 NRF-rated researchers, three Centres of Excellence and 12 Research Chairs. SU designed and manufactured Africa's first microsatellite, SUNSAT, which was launched in 1999. South Africa's second microsatellite, SumbandileSat, was launched in September 2009 under the management of the University, while the satellite was built by SunSpace, a spin-out company of SU.

Eight of the University's ten faculties — AgriSciences, Arts and Social Sciences, Education, Engineering, Law, Science, Theology, and Economic and Management Sciences — are situated on the University's main campus at Stellenbosch. The Tygerberg Campus is home to the Faculty of Health Sciences, while the Faculty of Military Science is located at the Saldanha Campus on the Province's west coast. The Business School and the School for Public Management and Planning are situated at the Bellville Park Campus.

Stellenbosch University has earned international recognition over many years for its excellence in all three pillars of its core function: teaching, research and community interaction. In addition, knowledge-based initiatives that are aligned with international development objectives provide proof that Stellenbosch University is transforming its vision of being a builder of hope in the South African and African context into tangible science for society.



GENERAL INFORMATION Founded: 1918 Undergraduate students: 15 390 Master's students: 4719 PhD students: 993 International students: 2 137 Academic staff: 867 Faculties: **AgriSciences Arts and Social Sciences Economic and Management Sciences** Engineering **Health Sciences Military Science Theology**

- According to the Department of Education, SU's formal weighted research output per academic staff member for the year 2008 was 2,13, the highest research output per capita of any university in the country. In addition, the University's research teams produce about 12% of the research output in South Africa.
- SU has 270 researchers with ratings from the NRF, 14 of whom have A ratings (researchers regarded as world leaders by their peers) and three of whom have P ratings (researchers regarded as potential world leaders by their peers).
- For several years, SU has been a major recipient of research funding from the Technology and Human Resources for Industry Programme (THRIP) of the Department of Trade and Industry, in terms of which the Department matches industry funding rand for rand.
- SU has retained the top position among universities in South Africa in terms of funding obtained through various bilateral partnerships managed by the NRF, with a total income of approximately R10 million.
- With innovative interdisciplinary programmes, the Stellenbosch Institute for Advanced Studies offers national and international researchers the opportunity to embark on thematically oriented projects.
- The Department of Science and Technology (DST) has established three out of only seven South African Centres of Excellence at Stellenbosch University in Invasion Biology, Epidemiological Modelling and Analysis and (in collaboration with the University of the Witwatersrand) Biomedical TB Research.
- The DST also adjudicated Stellenbosch as the Most Technologically Innovative Campus in the country

 largely due to its e-campus initiative, which encourages the use of technology for improving teaching and research.
- Spearheading innovation on the campus is InnovUS, the University's technology transfer company. InnovUS, one of the oldest technology transfer companies in the country, facilitates technology transfer from the academic to the commercial environment, taking the benefits of scientific inventions to communities.

- SU makes science work for Africa through seven centres with a special focus on Africa:
 - The African Business for Sustainable Natural African Plant Products brings research proficiency to individuals in order to ensure sustained agribusinesses.
 - The African Institute for Mathematical Sciences is an internationally acclaimed initiative in Muizenberg supported jointly by the Universities of Cambridge, Oxford, Paris-Sud, Cape Town, Western Cape and Stellenbosch, that develops talented young mathematicians from Africa.
 - The National Institute for Theoretical Physics gives local physicists international exposure and trains future African theoretical physicists. It provides theoretical underpinning for national programmes and has regional centres at the Universities of KwaZulu-Natal and Witwatersrand.
 - The Africa Centre for HIV/Aids Management equips students with the knowledge and skills to manage the impact of HIV/Aids in the workplace.
 - The Ukwanda Centre for Rural Health coordinates and supports training and research initiatives in rural and underserved communities.
 - The Desmond Tutu TB Centre combines basic and cutting-edge research with the training of students in the Health Sciences.
 - Networking of African Congregational Theology develops Christian leadership in Africa.
- Striving to be relevant and taking its social responsibility seriously, SU has established itself as a national leader in community interaction. Solid institutional arrangements, incentives and flagship projects are in place to advance community interaction as a core function of the University. SU actively pursues the integration of community interaction with its other core functions of teaching, learning and research.
- Stellenbosch University hosts nine research chairs as part of the SA Research Chairs Initiative (SARChI) in the fields of: Functional Nanostructured Materials; Experimental Petrology; Advanced Macromolecular Architectures; Genetic Tailoring of Biopolymers; Post-harvest Technology; Photonics, Ultrafast and Ultra-intense Laser Science: Post-traumatic

- Stress Syndrome; Economics of Social Policy; and Property Law.
- Through a SA National Energy Research Institute (SANERI) Research Chair, the University acts as the hub for a postgraduate programme in Renewable and Sustainable Energy Studies.
- Stellenbosch University is home to two other research chairs: the HF Oppenheimer Chair in Human Rights Law and a South African National Roads Agency Limited (SANRAL) Chair in Payement Engineering.
- The University of Stellenbosch Business School (USB) is one of the few management schools outside of Europe that is accredited by the European Quality Improvement System of the European Foundation for Management Development. The School's MBA programme has also been accredited by the Association of MBAs of the United Kingdom.
- Stellenbosch University's First-year Academy (FYA), the first of its kind in the country, is an initiative that focuses specifically on success in the first year of study. In the Faculty of Health Sciences alone, this initiative has led to an improvement in the pass rate from 92% to 96% over the past three years, in spite of a greater intake of students from disadvantaged schools.

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UCTUniversity of Cape Town



Institutional profile

South Africa's oldest university, founded in 1829, as the South African College, has one of the most picturesque campuses in the world, situated on the slopes of Table Mountain's Devil's Peak. The College developed into a fully fledged university during the period 1880 to 1900 and during these years, built its first dedicated science laboratories and started the departments of mineralogy and geology to meet the need for skilled personnel in the country's emerging diamond and gold-mining industries. Another key development was the admission of women in 1887.

Between 1902 to 1918, when UCT was formally designated as a university, the Medical School was established and engineering courses and a Department of Education were introduced. Today, the academic project is arranged across eight faculties. The University is also home to Groote Schuur Hospital, where the world's first heart transplant by Dr Chris Barnard took place in 1967.

Apart from establishing itself as a leading research and teaching university in the decades that followed, UCT provided sustained opposition to apartheid, particularly in higher education. The University admitted its first small group of black students in the 1920s. The number of black students remained relatively low until the 1980s and 90s, when the institution committed itself to a deliberate and planned process of internal transformation. From the 1980s to the early 1990s, the number of black students admitted to the University rose by 35 percent. Currently, approximately half of UCT's students are black and just under half of the student body is female. The student body also comprises 22% international students who contribute to the rich diversity of UCT. Like the City of Cape Town, UCT has a vibrant, cosmopolitan community. Staff and students come from over 100 countries and the University has built links, partnerships and exchange agreements with leading African and international institutions that further enrich the academic, social and cultural diversity of the campus. Today UCT calls itself an Afropolitan university, reflecting its scholarly interaction with the Continent and the world.

UCT is regarded as one of the top research institutions on the Continent. Ranked 146 in the Times Higher Education World Rankings in 2009, UCT has more "A" rated researchers than any other South African university. It has 27 SARChI Chairs and 322 NRF-rated researchers.

UCT is committed to being an intellectual meeting point and sought-after destination for scholars worldwide who have an interest in Africa's place in the world. It seeks to contribute to the resolution of problems of global significance through a wide range of socially responsive activities, including research, teaching and external policy engagement and a rich array of social, cultural, sporting and leadership opportunities as well as programmes that stimulate the social consciousness of students.



GENERAL INFORMATION Founded: 1829 Undergraduate students: 15 778 Master's students: 3 266 PhD students: 1 019 International students: 4 209 Academic staff: 937 Faculties and schools: Commerce **Engineering and the Built Environment** Law **Health Sciences Humanities** Science **Graduate School of Business Centre for Higher Education Development**

- The Institute of Infectious Disease and Molecular Medicine has 25 research groups which concentrate on infectious diseases, particularly on HIV/AIDS and Tuberculosis, as well as other prevalent noncommunicable diseases. Of particular significance is a HIV vaccine developed at UCT by the South African AIDS Vaccine Initiative, approved by the USA Food and Drug Administration for testing in humans.
- The Brain Behaviour Initiative is a cross-faculty, multidisciplinary, collaborative framework that promotes research in the cognitive and affective neurosciences. New experimental techniques, including brain imaging, genetic testing and neuropsychological assessment, combined with new theoretical insights, have opened up significant biotechnology potential, and the opportunity for advancement of novel diagnostic tools and treatments for people with mental disorders.
- UCT's Drug Discovery Signature Theme aims to: foster new collaborations and strengthen existing ones between UCT researchers; build enabling technological platforms to increase research capacity; provide interdisciplinary undergraduate and postgraduate training in drug-discovery to drive research and build a critical mass of future scientists; create mechanisms for securing interdisciplinary and overarching funding.
- Research at the DST-NRF Centre for Catalysis focuses on chemical catalysis mainly for the conversion of gas to liquid fuels and for down-stream processing aimed at adding value to bulk chemicals. With the manufacturing sector being the largest contributor to South Africa's GDP and with chemical manufacturing the largest single contributor to the South African manufacturing sector, chemical processing is recognised as a distinct field for targeted innovation initiatives.
- UCT's Astronomy Department specialises in the study
 of galactic structure, the distance scale, large-scale
 structures and evolution of galaxies in the Universe,
 next to high-speed photometry and spectroscopy of
 cataclysmic variable stars. With the opening of SALT
 (the Southern African Large Telescope), new research
 areas were initiated in galaxy evolution and the search
 for intermediate mass black holes
- Nuclear research: UCT was the first university in South Africa to introduce undergraduate courses in nuclear engineering.
- UCT's Bioprocess Engineering Research Unit follows an integrated approach to optimisation and modelling of bioprocess systems and sub-processes for use in bioprocesses for economic, environmental and social benefit. Its research programmes contribute across water treatment, human health, minerals beneficiation, resource productivity and renewable resources.
- The Centre for High Performance Computing is a national joint initiative between UCT, the Meraka Institute of the Council for Scientific and Industrial

- Research and the DST. The system features, among other world-class technologies for scientific research, key technical characteristics such as 160 computer nodes made up of 640 processors and a shared storage capacity of 50TB.
- The African Centre for Cities undertakes interdisciplinary research on urban issues - both theoretical and applied - addressing complex urban problems in a manner that engages the real policy challenges facing Africa but that also hold valuable lessons for addressing urban processes in many parts of the world.
- UCT's Water Research Group focuses on developing mathematical models for simulating the chemical, physical and biological processes of wastewater treatment systems, and running experimental systems to validate these models.
- UCT's Environmental Evaluation Unit has established itself as a leader in the fields of integrated environmental management and sustainable development responding to local, regional and global environmental challenges using an interdisciplinary and participatory approach.
- The Percy FitzPatrick Institute of African Ornithology is uniquely positioned to take advantage of the vast untapped biological resources of the Continent. The Institute is home to the Niven Library, which holds Africa's most comprehensive Ornithology collection and reprints of the Institute's vast publication record. The Institute has been identified as a Centre of Excellence by the DST and the NRF.
- The Plant Conservation Unit undertakes research and teaching directed at improving the conservation status of the Cape Floristic Region, including the Fynbos and Succulent Karoo biomes.
- The Africa Earth Observatory Network (AEON) is a centre for Earth Systems Science that provides an interdisciplinary research and educational environment with a particular focus on Africa that brings together earth and life sciences, engineering, resource economics and the human sciences. The AEON science advisory group comprises 18 members spread across four continents, five South African universities and industry.
- UCT's Shipping Law Unit co-ordinates maritime law teaching at LLB and postgraduate diploma and LLM levels, and operates a research and information centre to serve both students and the shipping industry.
- UCT has the only School of Dance in the region, located within the South African College of Music. The College is considered to be the leading music school in South Africa. It offers a diverse range of degrees and diplomas in various disciplines including African Music, Composition, Jazz, Opera, Western Classical Music and World Music.
- The Lucy Lloyd Archive, Resource and Exhibition Centre works with history, narratives and images of southern African indigenous people, in particular the Bleek and Lloyd archive of /xam and !kun narratives.
- The Centre for Popular Memory is committed to training researchers to capture the stories of

- marginalised people using multilingual recording, multi-format archiving and the multi-media dissemination of peoples' stories through books, film documentaries, travelling exhibitions, radio programmes and the world-wide web.
- The Project for the Study of Alternative Education in South Africa is a research and development unit focusing on the democratisation of South African society, particularly in the key area of language-ineducation policy implementation.
- The Centre for Social Science Research is an interdisciplinary research centre that promotes quality and innovation in social science research in Southern Africa
- The Centre for Contemporary Islam is devoted to the study of Islam and Muslim communities especially those on the African Continent.
- UCT's Sports Science Institute exists to optimise the sporting performance and health of all South Africans through the execution, application and dissemination of science. The Institute offers a multi-disciplinary range of services and memberships that cater for a diverse spectrum of needs, from health and wellness to sporting excellence, using exercise, nutrition and mental health to enhance human performance.
- The Marine Research Institute is the leading marine research organisation in Africa, representing the interests of some 40 permanent marine researchers.
- A list of major equipment at UCT is available online, at www.uec.uct.ac.za

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UWCUniversity of the Western Cape



Institutional profile

The University of the Western Cape was established in 1959 as a constituent college of the University of South Africa for people classified as "Coloured". The first group of 166 students enrolled in 1960 and they were offered only training for lower to middle level positions in schools, the civil service and other institutions designed to serve a separated Coloured community. During the mid 1980's the University leadership saw an unambiguous alignment with the mass democratic movement which also brought a new edge to the academic project; under the banner of "an intellectual home of the left", space was created for curriculum renewal and for innovative research and outreach projects. Following the achievement of democracy in 1994, many of the University's senior academics and alumni found themselves in public office at all levels, a number in the national Cabinet. The University continued to grow, and today it ranks in the upper group of universities in the country and in Africa. The University has several leading research units, and produces the largest number of black Science graduates annually. The University has positioned itself as an Engaged University, relating to the University's unfolding sense of itself and of the ways in which it is facing the challenge of being an excellent university in a global environment while at the same time remaining responsive to the social and economic development imperatives of the country.

Community Engagement

UWC challenges its students through various forms of community engagement opportunities that range from volunteerism, community based education, and service-learning within various disadvantaged community sites of learning that facilitate and aid the development of graduates who recognise their social responsibility to engage communities and contribute to transformation. This vision is in line with UWC's Charter of Graduate Attributes.

Brief profile

- UWC is ranked 7th in Africa in the EU-based Webometrics 2009 survey.
- Of South Africa's 23 universities, a recent NRF survey:
 - places UWC 5th in proportion of rated researchers on the fulltime academic staff
 - 7th in proportion of PhDs on the staff and
 - in the top three in the research areas of Biotechnology, History and Development Studies.
- UWC has 3 WHO Collaborating Centres, the largest number at any institution in Africa, in Oral Health, Public Health and Pharmacy. As one of 5 dental schools in the country, UWC produces 47% of all the country's new dentists.
- UWC was awarded 3 NRF SARChI Research Chairs in 2009 and has 70 rated researchers.
- UWC is recognized as having the most advanced research-based Recognition of Prior Learning programme and
 is internationally renowned for research into the philosophy and practice of Lifelong Learning and Adult Learning.



GENERAL INFORMATION Founded: 1959 Undergraduate students: 12 860 Master's students: 1 502 PhD students: 421 International students: 1 230 Academic staff: 518 Faculties and schools: **Community and Health Sciences Dentistry Economic and Management Sciences** Education Law **Natural Sciences**

- DST Centres of Excellence: UWC hosts a Department of Science and Technology National Centre of Competence, namely the Competence Centre in Systems Integration, Analysis and Technology Validation, a flagship project on hydrogen and fuel cell technology, also known as the HySA Systems Competence Centre. A National Centre of Excellence, namely the DST/MinTek Nanotechnology Innovation Centre: Biolabels Unit is located at UWC, as well as a NIC BioSensors Unit. Using a range of technologies for the identification of targets for disease identification and therapeutic intervention in cancer, diabetes and HIV/AIDS, the Biolabels Unit is working on developing novel diagnostics both in vitro and in vivo. The DST has also established a Nanoscience Centre at UWC to develop South Africa's human capital needs in this area.
- The Institute for Microbial Biotechnology and Metagenomics (IMBM) has diverse research interests in the fields of microbial ecology and microbial biotechnology. One of the major fields of study is on micro-organisms that inhabit very cold environments, particularly on the Antarctic continent. IMBM researchers also study micro-organisms living in high temperature environments.
- At the South African Institute for Advanced Materials
 Chemistry research is mainly focused on novel energy
 generation technologies. This includes production,
 separation, extraction and storage of hydrogen gas from
 various sources available and specific to South Africa
 with the aim to offer novel, efficient solutions to
 problems that relate to the supply of sustainable energy.
- The South African National Bioinformatics Institute
 performs cutting-edge computational biology research
 and is the African Hub for the discipline of Bioinformatics
 researching biomedicine and biology through
 computer technology. The Institute provides long-term
 skilling to impact on diseases prevalent in Africa, in
 particular the discovery of genetic factors that contribute
 to disease resistance in hosts, e.g., HIV and Man, and
 the genetic relationship contributing to cancers.
- The Centre for Humanities Research's leading research platform is the Programme on the Study of the Humanities in Africa. The Centre also hosts the Investigation of Multilingual Practices and Cities in Transition, colloquia on War and the Everyday in Africa, the Critical Heritages colloquia, the African Programme in Museums and Heritage Studies and the Aesthetics and Politics study circle.
- The UWC Institute for Poverty, Land and Agrarian Studies (PLAAS) is a leading research and teaching centre with an international reputation for high quality applied research and critical scholarship. PLAAS engages in research, training, policy development and advocacy in relation to land and agrarian reform, rural governance and natural resource management.
- The South African Herbal Science and Medicine Institute (SAHSMI) is the only institute in the country

- accredited to offer research degrees in Herbal Sciences with a focus on drug discovery and development of Plant Medicines for AIDS, opportunistic infections and immune modulation. SAHSMI hosts The International Centre for Indigenous Phytotherapy Studies in Africa, a consortium funded by the National Centre for Complementary and Alternative Medicine and the National Institute of Health (NIH) in the USA.
- The new UWC HIV and AIDS Research Centre will become a world-class hub for sharing, developing and implementing engaged policy and practicerelated research that tackles HIV and AIDS prevention, treatment and care within a comprehensive, systemic, inter-sectoral and interdisciplinary perspective.
- UWC hosts the Interdisciplinary Centre of Excellence for Sport Sciences and Development (ICESSD). The aim of ICESSD is to be Africa's leading interdisciplinary centre of excellence promoting sport as a powerful tool for development, health, wellbeing and social change.
- The Community Law Centre played a key role in drafting the South African Children's Act and the 2008 Child Justice Bill and currently enjoys observer status with the African Commission on Human and People's Rights.
- The School of Science and Mathematics Education is the only UNESCO/UNITWIN Centre of Excellence in Science and Mathematics Education in Africa and incorporates a UNESCO Chair in Science and Mathematics Education.
- UWC hosts the UNESCO Chair in Hydrogeology
 within the Institute for Water Research. It is a major
 advisor to the African Council of Ministers and trains
 water scientists in the SADC region. The Institute
 has a strong focus on Groundwater Management
 and is the only institute in the Western Cape where
 groundwater is offered as a major focus area within an
 environmental degree.
- Research Support: The Proteomics Unit houses two advanced MALDI-TOF mass spectrometers for twodimensional separation of proteins, imaging and analysis tools, automated spot picking and mass spectroscopy tools required for the identification of proteins of interest. The Genome Analyser Facility is the only sequencing facility of its kind in Africa. The system has been used to analyse genome sequences and to determine the patterns of gene expression. Research in the Structural Biology Facility focuses on the expression and purification of recombinant proteins for structure determination work, and the computational infrastructure required for structure solution, molecular modelling and docking analysis. UWC houses state of the art Protein X-ray crystallography and Electron Microscope facilities.
- Cape Flats Nature Reserve is a Provincial Heritage site and functions as a base for ecological teaching, environmental education and research. This core flora conservation site is one of the best preserved areas of strandveld on the Cape Flats with over 220 species of indigenous plants and it is the last fully representative patch of Cape Flats fynbos occurring on wetlands, flatland areas and in dunes.

- The School of Natural Medicine focuses on systems
 of medicine that complement and enhance the body's
 natural capacity to heal by restoring balance without
 the use of synthetic drugs or chemicals. The School
 offers programmes in Naturopathy, Phytotherapy
 (Western Herbal Medicine) and in Chinese Medicine
 and Acupuncture.
- UWC is Africa's leader in Free and Open Source Software development, through the work of the Free Software Innovation Unit and is the initiator of AVOIR, a network of African universities in 13 African countries developing free software for use in higher education.
- The UWC/Robben Island Museum Mayibuye Archive is a national heritage resource, housing South Africa's major collection of documents, photographs, films, posters and art objects concerning the liberation struggle. Initiated by UWC, the project is run in association with the Robben Island Museum, which provides the collection protection as a national resource.
- The Institute for Social Development (ISD) researches socio-economic issues in Africa and offers Honours, Master's and PhD programmes in Development Studies to students from more than 24 countries. The ISD has done pioneering work in a number of policy related fields, including scenario planning and social policy.
- The African Centre for Citizenship and Democracy plays a critical role in mobilising scholars and resources towards a constructive and critical examination of the factors and policy environments which support or inhibit the development of a more inclusive citizenship in the region and Continent.

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The Cape Higher Education Consortium (CHEC)

The Cape Higher Education Consortium (CHEC) aims to establish the Western Cape as a strong higher education region which, through systemic inter-institutional cooperation and academic programme collaboration, will be

- Distinctively responsive to regional, national and international developments in the knowledge economy of the 21st century
- Sensitive to historical realities in promoting equity across its institutions
- Cost effective and of high quality.

This academic consortium comprises the four public universities in the Western Cape that are elaborated in this brochure. All of the universities are within a forty-minute range from each other by road and share a single automated library system.

The CHEC Board of Directors comprises four senior executives, usually the deputy vice chancellors charged with academic affairs, and the CHEC chief executive officer. The Board operates under delegated authority from the Councils of the four universities.





The Western Cape is home to four internationally acclaimed universities:

- Cape Peninsula University of Technology
- Stellenbosch University
- University of Cape Town
- University of the Western Cape



Four universities Unlimited possiblities







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