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of south africa*

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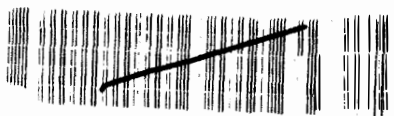
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SOUTH AFRICAN HUMAN SCIENCES RESEARCH COUNCIL

**UNIVERSITY EDUCATION IN THE REPUBLIC
OF SOUTH AFRICA**

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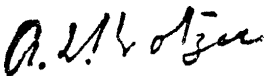
P R E F A C E

This book is a revised version of University education in the Republic of South Africa, which appeared in 1972.

The aim of the publication is to provide concise, authoritative and easily digestible information on

- the South African geographic, topographic, economic and political background;
- South Africa's historical development;
- the development of education, especially university education, for all the population groups;
- the origin, growth and present state of universities in the country;
- the academic faculties, courses offered and degrees and diplomas to be obtained at South African universities;
- libraries, museums and other amenities associated with or within reach of universities, and
- research and other academic organizations attached to or associated with universities.

Information such as is provided in this volume has been much in demand in South Africa as well as in other countries, and the HSRC trusts that the book will serve a useful purpose.



PRESIDENT

C O N T E N T S

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UNIVERSITY EDUCATION IN THE REPUBLIC OF SOUTH AFRICA

CHAPTER 1

SOUTH AFRICA *GEOGRAPHIC, TOPOGRAPHIC, ECONOMIC AND POLITICAL BACKGROUND

GEOGRAPHY

Geographically the Republic of South Africa is a large country, comprising the southern tip of Africa, once called, and as regards parts of it perhaps still, the Dark Continent. From Cape Agulhas, the southernmost point, where the Atlantic meets the Indian Ocean and the wild Southeaster has been the bane of ships and sailors for centuries, it stretches for some 1800 kilometres, as the crow flies, to Messina, the northernmost town near the banks of the Limpopo River, the boundary between South Africa and Rhodesia. From Port Nolloth on the Atlantic west coast it rises and falls for 1400 kilometres to Durban on the Indian east coast of Natal, likewise as the crow flies. By road the distances are considerably longer.

AREA

The country covers an area of 1 206 900 square kilometres as compared to Great Britain's 245 000. In addition South Africa is responsible for governing the mandated territory of South-West Africa, a land of 824 000 square kilometres, for the most part arid and very thinly populated, which the Republic seems to cradle in an arm, the lower end of the Orange River.

PROVINCES

The Republic has four provinces, the Cape of Good Hope in the south, the Orange Free State in the centre, Natal to the east and Transvaal to the north. The Cape is 712 640 square kilometres in size, the Orange Free State 127 680, Natal 85 950 and Transvaal 280 640.

COAST LINE

From the mouth of the Orange River on the Atlantic Coast, where the Republic borders on South-West Africa, the Cape coast runs in an on the whole remarkably smooth line more or less southwards to Cape Point for about 900 kilometres, and then eastwards and

north-eastwards to Port St. Johns and Port Shepstone and northwards up the Natal coast to Ponta do Ouro on the Moçambique border for another 2000. Added to this there is the South-West Africa coast line from the mouth of the Orange River northwards to the boundary of Angola at the mouth of the Kunene River, a distance of some 1500 kilometres. These figures mean that South Africa has a coast line of over 4000 kilometres to protect.

BANTU STATES

Four Bantu states, three of which obtained independence from Great Britain in 1966, lie almost or wholly within South Africa's boundaries. West of the Transvaal, north of the Cape, bordering on South-West Africa in the west and north and on Rhodesia in the north-east, lies Botswana, the former Bechuanaland. North of Natal, east of Transvaal and bordering upon Moçambique in the east, lies Swaziland. Lesotho, formerly Basutoland, nestles amidst its mountain fortresses against the Eastern Free State, the North-eastern Cape and Western Natal.

From beyond East London on the south-eastern Cape coast to near Port Shepstone on the shores of Natal runs the famous "wild coast" of the Transkei, home of the Xhosa and formerly the largest of the South African Bantu "homelands". In October 1976 it was granted complete independence by the government of the Republic of South Africa and it is now a sovereign state. It stretches inland for long distances, to the Kei River, the Drakensberg Mountains and the south-eastern border of Lesotho.

BANTU HOMELANDS

Partly bordering upon the Transkei is the Ciskei homeland, parts of it scattered over what is called the Cape Border, between such towns as East London, Grahamstown and Queenstown.

A part of Northern Natal is called Zululand, most of it now comprising the largest of the homelands, that of the Zulu, parts of which are situated in the rest of Natal.

In the far northern and north-eastern parts of the Transvaal are the homeland areas of the North Sotho, Venda, Shangaan and Swazi, and in the Western Transvaal and the Northern Cape those of the Tswana.

OTHER NEIGHBOURS

The northern boundary of the Transvaal is the Limpopo River, with Rhodesia on the other side. Transvaal also shares a long

eastern boundary with Moçambique along the Lebombo Mountains, while Northern Natal has a short boundary with Moçambique.

TOPOGRAPHY

Topographically South Africa has been likened to an upturned saucer, rather irregularly made and somehow half finished. If we could find a suitable spot on the plateau of the saucer, say above the centre province, the Orange Free State, and rise high enough to get a complete bird's eye view of the country, we should broadly discern the following:

In the distant west, near the mouth of the Orange, South Africa's "Great" river, a range of mountains starts. It moves more or less parallel and rather close to the west coast, then swings inland in a wide arc, still more or less parallel to the coast, travels eastwards and north-eastwards through the interior of the Cape Province, then northwards past the Transkei, between Lesotho and Natal, between Swaziland and Transvaal, until it eventually peters out not far from the Limpopo River on the Rhodesian border. This is the Great Escarpment, the jagged, irregular edge of half the circumference of our upturned saucer plateau.

If we now look back to where the Escarpment starts near the mouth of the Orange River, we notice on the northern side of the river mouth a tiny spot. This is Oranjemund. South of the mouth there is another tiny spot, Alexander Bay. These are "closed" areas where diamonds are dug from the sand, officially, scientifically and in considerable quantities. As our eyes travel northwards along the coast of South-West Africa, we see the great Namib Desert flanking the whole long coastline, one of the most desolate in the world, aptly called "Skeleton Coast". Halfway along it lies Walvis Bay which, incidentally, is part of the Republic, a bay and a bit of land annexed by the old Cape Colony in 1876 when what is now South-West Africa was to be had for the taking, with no takers interested.

Southwards from the Orange River mouth the coast line is less desolate but still lonely and the slope of the saucer from the Escarpment to the sea is short and semi-arid. Our eyes pass over tiny dots - Kleinsee and Nababeep and O'Kiep, where copper was discovered three centuries ago and is mined in goodly quantity today. As we look further south, the gap between escarpment and sea widens, the land gradually becomes greener and the coast line more active, enlivened by a flourishing fishing industry. Still further to the south wheat lands begin to appear, and then

orchards and vineyards - and suddenly we have arrived in Cape Town, legislative capital, in the incomparably beautiful Cape Peninsula, "the fairest cape in the whole circumference of the earth", dominated by queenly Table Mountain, and in the Western Province, seat of South Africa's oldest culture, where nature has been bounteous and some of the gracious living of days gone by still remains.

But as we were looking southwards, another outstanding feature of the landscape struck us. More or less from the point where the gap between the Escarpment and western sea coast begins to widen and the Escarpment curves boldly inland, new mountain ranges start, move more or less due south, almost to the sea in the Western Province, and then abruptly eastwards in an almost unbroken line, straight towards the East London coast, short of which they flatten out into sloping downs and lovely valleys. These are the beautiful Fold Mountains, known in different localities by different picturesque names.

Approximately between the southern slopes of the Escarpment and the Fold Mountains lies the immense semi-desert Great Karoo, up to 250 million years ago a vast inland sea, to-day a hunting ground of archaeologists and the breeding area of some of the finest wool sheep in the world.

As the Fold Mountains sweep eastwards, they split into two ranges for a matter of some 300 kilometres, forming the Little Karoo in between, with the flourishing town of Oudtshoorn, once the headquarters of the richest ostrich feather industry on earth, as its metropolis.

From the lovely Western Cape, across parts of the Fold Mountains and between them and the sea, winds the famous Garden Route, scenically one of the world's great drives. Beyond Port Elizabeth it enters the Border area, with its sweeping plains and downs and valleys, its beautiful towns and its mixed Bantu and White population. This is pre-eminently the land of the British Settler and British South African Culture, with the gracious city of Grahamstown as its headquarters, seat of Rhodes University and the site of some of the most beautiful churches in the country.

Beyond East London one enters the Transkei, a fertile land of plains, slopes, valleys and a good rainfall, a land with great possibilities. From the Transkei one moves into Southern Natal with the picturesque South Coast on one's right and the peaks of the Great Escarpment (here called the Drakensberg Mountains) on one's left. Scenically Natal is South Africa's most beautiful province, its Garden Province, with a largely subtropical climate

and practically the whole of its coast a round-the-year holiday resort; with tropical fruit, grain, cattle and dairy farming, industries and vast sugar cane plantations, mainly north of Durban, its glittering metropolis.

From our imaginary vantage point high in the sky above the centre of the Great Plateau we scrutinize the landscape below us further.

Directly below is the Orange Free State, with its staid capital, Bloemfontein, also the judicial capital of the country, in the centre. The Free State is mostly high, flat country, sweeping away to the west, north, east and south, with low hills dotting the landscape here and there. Eastwards the land runs into the mountains of Lesotho and the borders of Natal and the Transkei. From these mountains on the eastern edge of the Great Escarpment, which contain the highest peaks in the country, the great Orange River originates and flows westwards. On the Natal side many rivers arise, the greatest among them the bright Tugela.

North of Bloemfontein the busy goldfields of the Free State can be seen, amid maize and wheat fields. The plains reach the Vaal River, great tributary of the Orange, which supplies water to the whole of the mighty mining and industrial complex of what is called the Vaal Triangle, with roaring Johannesburg at its centre. North of Johannesburg is steady Pretoria, administrative capital, pleasant, sprawling city of government, learning, civil servants, industrial smoke and screaming military jets - for near Pretoria are the Army and Air Force headquarters.

North of Johannesburg the country gradually falls, changing from High Veld to Middle Veld (or Bushveld Basin) to a low depression along the Limpopo River and the real Low Veld east of the northern end of the Great Escarpment. From the edge of the Escarpment here the land drops with startling abruptness from a height of some 2000 metres above sea level to about 200, with the Lebombo Mountains on the Moçambique border in the distance. Along the Moçambique border lies the famous Kruger National Game Reserve. Finally, from our high vantage point, we look westwards and north-westwards, towards Kimberley on the Free State border, diamond headquarters of the world, where the greatest hole ever dug by man in his search for treasure in the bowels of the earth is the prime tourist attraction. Further westwards we look, across flatlands towards the Kalahari Desert on the edge of South-West Africa, across dunes and more flatlands to the Namib Desert and the sea. North-westwards we see the sandy flats and bush lands of Botswana and northern South-West Africa, until we discern the distant Kunene River on the Angola border and look beyond and towards the right to Angola, Zambia and Rhodesia.

A huge land is South Africa by European standards, larger than Britain, Germany, France and Italy put together, but small by American standards - only one-sixth the size of the USA. It is a land of great variety and shrill contrasts, of cool high veld and hot low veld, of subtropical vegetation and barren plains, of teeming cities and lonely farmsteads, of snowcapped mountains and bustling bathing beaches; a land of overwhelming grandeur and intimate loveliness; always a beautiful land, even in its harshness.

A proud land also is South Africa, a land with a stirring history that still has to be suitably written, a land young in the annals of written history but old in the story of the origin of beast and man, for the indications are clear not only that the Karoo swamps and other parts of the land were once the habitat of primeval creatures, but that man's own fierce forbears roamed the plains of Southern Africa a million years ago. Here more probably than anywhere else was the birthplace of Man.

POPULATION

According to the latest estimates of the Department of Statistics South Africa has some 25 000 000 inhabitants, composed as follows, in round figures:

Whites	4 000 000
Coloureds	2 300 000
Indians (Asiatics)	700 000
Bantu in main groups:	
Xhosa	4 633 000
Zulu	4 758 000
Sotho	1 606 000
Tswana	1 989 000
Pedi	1 901 000
Shangaan	770 000
Ndebele and miscel- laneous	582 000
Venda	425 000
Swazi	559 000
Foreign Blacks	522 000

All the main Bantu groups are divided into numerous sub-groups. The Bantu Homelands are the areas originally settled by Bantu, who started gradually moving southwards from Central Africa about the time when the Portuguese found a route to India round

the southern tip of Africa at the end of the 15th century. The white man, whose pioneer drive, initiative and know-how have made South Africa one of the most prosperous and progressive of civilized countries, and who settled land that no one else could lay claim to, has all the right in the world to be in Southern Africa and stay there. Southern Africa is the White man's homeland also. White South Africans have no other.

South African government policy for the peaceful co-existence and maximum development of the various population groups is "separate development", of which the main virtue is that it recognizes group differences, maintains group identity and avoids group confrontation and friction, whatever the problems accompanying it may be.

Within the framework of "separate development" the Bantu Homelands, backward but with good potential, are being developed agriculturally and industrially at an increasing pace, and self-rule is granted to them as they ask for and become able to cope with it. Eventual independence is planned for all of them. The Transkei has already acquired it. As they develop, they will be able to absorb an ever greater percentage of their peoples, more or less half of whom still live and work in the "White" areas, which also contain the Indians and the Coloureds.

In the "White" areas there is residential, educational and largely work separation of different population groups. Politically the Whites are in charge, but the Indians and Coloureds have Councils to which they elect members and whose task it is to look after the general interests of their groups and to serve as liaison between their peoples and the government, while all the Bantu have voting rights in their homelands, all of which have either local authorities or home rule.

The key to whatever future development may take place with regard to political dispensations for Non-White groups is education, a field in which almost fantastic progress has been made in the past few decades, under the guidance and on the initiative of the government and White South Africa, but with the increasing co-operation and participation of the Non-White groups.

No man, however knowledgeable he may be, can predict exactly what the future political and other developments will be, or presume to prescribe what they must be. The rise in educational standards, coupled with a rise in living standards and general economic growth, in which all the inhabitants of South Africa have a part, will help to shape the future, and the shape of this future must and will be determined by the people of South Africa

themselves, White and Non-White. What part each group will play and what "rights" it will have will to a great extent be determined by the contribution it makes and is capable of making to individual, group and general welfare. No group, whatever its colour, has a greater claim on South Africa than any other group, but "rights" cannot merely be demanded, they must also be earned.

ECONOMY

Until the period between the two world wars the South African economy relied mainly on mining and agriculture, but even before 1940 determined efforts at industrial expansion were made. In and after the Second World War industrial growth as well as growth in the other sectors of the economy has been almost explosive.

In 1911 the gross domestic product amounted to R300 million; in 1920 to R558 million; in 1930 to R551 million (during the great depression); in 1940 to R987 million; in 1950 to R2549 million; in 1960 to R4973 million; in 1966 to R8180 million; in 1968 to R9641 million; in 1972 to R15 071 million and in 1974 to R21 497 million.

The rate of growth reflected by these figures is high, in some cases over ten per cent. A more or less stable growth rate of 5,5 per cent is envisaged for the years ahead.

The various sectors of the economy contributed as follows per cent to the gross domestic product in 1975:

Manufacturing	24
Wholesale and retail trade, catering and accommodation services	13
Mining and quarrying	13
Finance, insurance, real estate and business services	11
General government	10
Transport, storage and communication	9
Agriculture, forestry and fishing	8
Construction (contractors)	5
Other producers	3
Electricity, gas and water supply	2
Community, social and personal services	2
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The Republic produces more than 70 per cent of the Free World's gold, has the world's largest chrome and some of the largest manganese, vanadium and antimony reserves, apart from many other mineral deposits; is one of the greatest producers of diamonds and other gems and one of the most important sources of uranium. It has large reserves of coal and iron ore, is a large-scale manufacturer of iron and steel products and has at Sasolburg in the Orange Free State the most successful oil-from-coal production plant existing. A second "Sasol" is being established on the Eastern Transvaal High Veld.

Industrial expansion is proceeding at a most impressive rate. Apart from the second "Sasol" and expansion in the private sector, the public corporations Iscor (S.A. Iron and Steel Industrial Corporation) and Escom (Electricity Supply Commission) are mainly responsible for some gigantic new projects: new iron and steel works at Newcastle in Natal; the development of Richard's Bay on the Natal north coast as a major commercial harbour; the Sishen-Saldanha project, embracing an 800 kilometre railway line from the ore fields of the North-western Cape to Saldanha Bay some 150 kilometres north of Cape Town, and the development of Saldanha Bay into another major commercial harbour; and South Africa's first nuclear power station at Koeberg near Cape Town. South Africa also has an important share in the Cabora Bassa Dam and hydroelectricity project in the Zambesi River to the north of Mozambique.

South Africa's greatest industrial and agricultural problem is water. The country's rainfall is on the whole fairly low and also rather erratic, and droughts alternating with floods are a common occurrence. Except in Natal, on the Transvaal Low Veld side of the Great Escarpment, and in some parts of the Western and South-western Cape, there are no perennial rivers, nor is any South African river commercially navigable. Even the great Orange runs dry at times, flooding its banks far and wide at others.

Water conservation and the effective and most economical use of water are receiving high priority in South Africa. A mighty Orange River Project is in progress to serve huge areas of the Eastern and Northern Cape and the Southern Free State. The Hendrik Verwoerd Dam, the largest in the country, has already been completed in the higher reaches of the river, and lower down the P.K. le Roux Dam is nearing completion. The third to be completed will be the Van Der Kloof Dam. Many smaller but also important projects are undertaken or have been completed. During 1970, which was "water year" in South Africa, a master plan for the future was drawn up and accepted by the government.

South Africa is facing the problem with determination and initiative and will solve it. A project similar in scope to that of the Orange River has already been announced for the Western Cape.

DEMOCRATIC GOVERNMENT

Politically the Republic of South Africa is a parliamentary democracy, with a system of government mainly inherited from Britain, even though at present only Whites of 18 and over may elect members of the Central Government and the four Provincial Councils. The President, Head of State, with more or less the same status and functions as the British monarch, is elected by the members of Parliament and the Senate. The Legislative Assembly or Lower House has 160 members, each representing a constituency. Six of them represent South-West Africa.

Every province has its own Provincial Council, with members elected as for Parliament, an Executive Council chosen by the majority or ruling party and an Administrator appointed by the Central Government. Provincial Councils are mainly responsible for roads, hospitals, local government and primary and secondary education within the boundaries of their provinces.

The Upper House or Senate has 54 members, most of them elected by the members of Parliament and of the Provincial Councils, and a small number appointed by the Government.

The Government is headed by the Prime Minister, who is the leader of the majority party. The minority party or parties constitute the Opposition, with a Leader chosen from their ranks. The strongest of the Opposition parties is regarded as an alternative government, and the Leader an alternative Prime Minister. He has a shadow cabinet.

The Prime Minister and his Cabinet of Ministers, at present 18, with six Deputy Ministers (not members of the Cabinet), form the Executive, with headquarters in the stately Union Buildings at Pretoria and government offices scattered over the city.

From January to June every year Parliament and the Senate meet to enact laws in the Houses of Parliament in the Gardens in Cape Town, the oldest park in the country, founded shortly after Jan van Riebeeck, founder of the South African nation, landed at the foot of Table Mountain on 6 April 1652. No other parliamentary headquarters in the world has a more beautiful setting.

THE JUDICIARY

The South African Judiciary is completely independent. Its members are appointed by the Government from the ranks of senior advocates of impeccable standing and the highest integrity. The quality of legal training and procedure in South Africa is second to none.

Bloemfontein is the judicial capital and seat of the Appeal Court, headed by the Chief Justice. Divisions of the Supreme Court, each presided over by a Judge President, are based at Cape Town, Grahamstown and Kimberley (Cape Province), Bloemfontein (Orange Free State), Pietermaritzburg (Natal), with a branch at Durban, and Johannesburg and Pretoria (Transvaal).

The country as a whole is divided into a large number of magisterial districts with a magistrate presiding over a Lower Court in each district. In the larger areas there are chief magistrates with a number of assistants. In these areas there are also special regional courts with judicial powers higher than those of the lower courts and below those of the supreme courts.

From the lower and regional courts there is right of appeal to the Supreme Court and from the Supreme Court to the Appeal Court.

EDUCATION

Education in South Africa is controlled and organized by a number of State Departments, each headed by a Minister. For Whites it is the Department of National Education, for Coloureds the Department of Coloured, Rehoboth and Nama Relations, for the Bantu the Department of Bantu Education and for Indians the Department of Indian Affairs. In the case of the Coloured population the actual governing body is the Coloured Representative Council, consisting of Coloureds only, and the administration of education is undertaken by the Administration of Coloured Affairs. In the case of the Bantu each homeland has its own education department, while the South African Indian Council, consisting of Indians only, is in charge of the administration of education for Indians.

The HSRC publication The education of Whites in the Republic of South Africa presents a general review of the education of Whites in the country, from crèches and nursery schools to university training, as organized at present. The education of other population groups is on similar lines, and full information is

obtainable from the departments concerned.

The official Yearbook of the RSA, obtainable from South African embassies, contains an extensive chapter on the education of all the population groups.

CHAPTER 2

EDUCATION IN SOUTH AFRICA ; A BRIEF HISTORICAL REVIEW THE STORY OF SOUTH AFRICA

White South Africa was founded in 1652 when Jan van Riebeeck landed at the foot of Table Mountain to start a halfway refreshment station between Europe and India for the ships of the immensely rich and powerful Dutch East India Company. The refreshment station developed into a permanent settlement, and for almost a century and a half after that White men of European stock penetrated slowly inland in all directions into the vast empty spaces of what is now the Cape Province.

These White men were mostly Dutchmen to begin with, but their stock was gradually enriched by the immigration of other Europeans, mostly French Huguenots and a large number of Germans.

The settlers were all Protestants and their religious and social code strictly Calvinistic. In spite of their small numbers and the immense area over which they were scattered, their Calvinistic religion and code of ethics made of them a remarkably cohesive race who even developed their own language, Afrikaans. Their descendants are to-day, politically and in numbers, the predominant section of South Africa's White population.

About the time when the Portuguese were discovering a route to India round the Cape, the forbears of the modern South African Bantu started to move southwards from Central Africa. Most of them came along what are now the Northern Transvaal Lowveld, Swaziland and Natal on the eastern side of the Great Escarpment. As the Cape Colonists moved eastwards they eventually came up against the Bantu in what is now the Cape Border area beyond the Great Fish River, where their advance was halted towards the end of the 18th century.

In 1795, at a time when the once powerful Dutch East India Company was tottering and the distant Cape Colony had become more of an embarrassment than an asset to the Dutch Government, the British took over the Cape at the request of the king of the Netherlands.

The Dutch East India Company had had their problems with their Cape Colonists, since short-term mercenary company interests often clashed with the interests and beliefs of the colonists who had come to stay permanently in a new fatherland. As they

gradually settled the country and made it habitable, they became almost fiercely independent and company government, often shortsighted and unsympathetic, often corrupt and inefficient, irked them.

By the time the British took over in 1795, the area that is now the Western Province was fairly well settled, prosperous and peaceful, but in the outlying districts, especially towards and on the eastern border, there was unrest and dissatisfaction, the most important source of which was the handling by the authorities of Black/White relations. These problems the British inherited and their "liberalistic" outlook did not help to make relations between them and the colonists more amicable.

For a short while, from 1803 to 1806, the Dutch, then the Batavian Republic, took the Cape back and sent two most capable men, Janssens and De Mist, to govern the Colony. Their stay was, however, cut short when in 1806 the British, this time uninvited, took the Cape by military conquest and retained it as a British Colony until 1910.

In 1820 the British brought 5000 settlers from England who landed at Algoa Bay, now Port Elizabeth, and joined the scattered Afrikaner settlements in the present Eastern Province and Border areas. These settlers, their descendants, and those who came afterwards, established a proud British South African tradition.

The Afrikaners and the British Colonists got on very well together, but there were many causes of strife, political, economic and cultural, between the Afrikaners, especially of the distant eastern districts, and the British Colonial Government at Cape Town. The eventual result was a mass emigration of Afrikaners, who came to be called Boers because they were all farmers and the Afrikaans word for farmer is "boer", toward the open land beyond the "Great River" (the Orange). This migration is known as the Great Trek and took place from 1834 to 1838, when a number of groups under various leaders left the Cape one after another to find new freedom in the north.

The story of the Great Trek is one of the world's epics, in memory of which the imposing Voortrekker Monument arose on a hill near Pretoria and was inaugurated in 1949.

In what is now the Orange Free State the Voortrekkers found small, scattered tribes of Bantu with whom they negotiated peacefully for land to settle on. In the Northern Free State, however, they clashed with the fierce Matabele tribe, an offshoot of the Zulu, who had come from across the Vaal River to drive out the new

settlers. The Matabele were defeated and fled back north. The Trekkers founded the first of their new settlements at Winburg in the Orange Free State.

Some Voortrekker leaders, especially the famous Piet Retief, wanted to make sure of a future harbour and outlet to the sea. Port Natal, now Durban, seemed the obvious place, and the Trekkers moved across the formidable Drakensberg Mountains into what seemed to them the land of promise. Here they came up against the Zulu, proudest of the great Nguni tribes who had migrated south from Central Africa and for generations, especially under their legendary chief Chaka, had terrorized and often exterminated smaller tribes. Their leader was corpulent, cunning and treacherous Dingaan, who negotiated amiably with Piet Retief in connection with land, of which there was plenty for all, made his mark on an official contract, and then had Retief and his company battered to death at a subsequent feast in his royal kraal.

This act was the signal for war between Zulu and Trekkers, a war which ended on 16th December, 1838 at the Battle of Blood River, where 460 Trekkers defeated an army of ten thousand Zulu, established their right to part of the land and afterwards founded the Republic of Natalia, with the capital Pietermaritzburg, named after the two Trekker leaders Gerrit Maritz and Piet Retief.

For various reasons, political and economic, the British authorities refused to leave the Trekkers alone, and in 1843 they annexed Natal, taking the next of many steps which were meant to bring the recalcitrant Boers to heel, but resulted in what was called by a later Boer leader the Century of Wrong, and have mainly been responsible for strained relations, even personal enmity, between Boer and Britisher, a state of affairs that to some degree exists to this day. Most South Africans of to-day, however, have forgotten past hatreds and strife and are honestly trying to face the future as a truly united nation.

Most of the Trekkers left Natal, struggled back across the Drakensberg Mountains and founded the Republic of the Orange Free State. Then some moved over the Vaal River into what is now the Transvaal to found the South African Republic.

For a time the British, who, among other things, were occupied with a series of "Kaffir Wars" on the eastern frontier, washed their hands of this obstinate little nation and at the Sand River Convention of 1852 and the Bloemfontein Convention of 1854 formally acknowledged the independence of the two Boer republics. But their dreams of empire remained, and they proceeded to

surround the little republics with British possessions. They annexed all the land between the Fish River and Natal, to the east, Bechuanaland to the west and Rhodesia to the north, the latter named after the great British Empire Builder of South Africa, Cecil John Rhodes, Prime Minister of the Cape towards the end of the 19th century. The Cape had been granted representative government in 1853 and full responsible government in 1872.

In the 1870's diamonds were discovered at what is now Kimberley and was then part of the Orange Free State, and in the 1880's gold was found in the Eastern Transvaal and on the Witwatersrand, where Johannesburg grew on gold mine foundations.

The British "bought" the diamond fields from the Free State for £90 000, the value of a few days' diamond production, and made them part of the Cape. In 1877 they annexed the Transvaal, but at the famous battle of Majuba in 1881 the Boers defeated them and their country was handed back. In 1895 Rhodes furtively organized the notorious Jameson Raid in an attempt to take possession of the South African Republic (Transvaal), but the raid was ignominiously squashed and Rhodes and his henchman Jameson did not come out of it with honour.

War between the republics and the British Empire was, however, inevitable and broke out in October 1899. The Boers were gallant fighters and in the first stages of the war swept everything before them. Poor military strategy on the part of some of their commanders wiped out their early successes and by the beginning of 1901 the British armies, some 250 000 against the original 60 000 Boers, swarmed across their country. Then followed the renowned guerilla war that made commanders such as Christiaan de Wet and Koos de la Rey world-famous.

The end was also inevitable. The Boers eventually lost the war and on 31 May 1902 signed away the independence they had cherished, lived for, worked for and fought for over more than two centuries. The Transvaal and the Free State became British colonies.

But this was not the end of Afrikaners or the dream of South African independence. A liberal government came to power in Britain and the two former republics were granted responsible government in 1906 and 1907. In 1910, after protracted negotiations, the Cape, Natal, Transvaal and the Orange Free State formed the Union of South Africa, with each of the four provinces retaining a measure of autonomy. In 1931 this Union became a sovereign member of the British Commonwealth of Nations.

In 1961 came the final step on the road to independence, when the Union of South Africa became the Republic of South Africa, and as such requested to remain within the Commonwealth. So many objections were raised, especially by the many new nations who had become members since 1931, that South Africa withdrew her request for continued membership.

Such is, very briefly, South Africa's historical background. Against it the rest of its story must be seen, its religion, culture, politics and education, the relationship among its peoples and its relations with and attitude towards the rest of the world. White South Africa is determined to survive, prosper and grow, but in striving for that survival it is also anxious that justice be done to all South Africa's peoples. After all, when the Voortrekkers settled in Natal, the Free State and Transvaal, they also made an end to the internecine war among the Bantu tribes that had gone on for many generations and had threatened to destroy most of them. Far from annihilating or oppressing the Bantu, the White man enabled them to survive and multiply greatly, and what advance they have made is largely due to what the White man has made possible and is still making possible for them.

THE STORY OF SOUTH AFRICAN EDUCATION

EARLY DAYS

The state-controlled education systems of the world of to-day are scarcely more than a century old. Before that education was mainly the business of the Church, but also of the family, the community and of enterprising individuals. So it was in South Africa also, in many ways. It must be noted, however, that even though the Dutch East Indian Company rulers were business men in the first place, they were also steeped in the Protestant religion of their day and provided for the religious instruction and education of their peoples at the Cape and elsewhere.

The early Afrikaners, mainly Dutch, French and German in origin, were strict Calvinists, with an implicit, almost literal belief in the Bible, and they were by no means uncivilized or uneducated, even though formal schooling was often out of the question as they moved inland in small, scattered groups. But the Church, especially the Dutch Reformed Church, followed them wherever they went and kept them together with bonds of religion, culture and a code of ethics, of personal and social behaviour, which, even if it sometimes seemed over-strict, enabled them to retain their identity, their traditions and their culture to this day.

Even on trek, whether groups were large or small, the rule of law was strictly observed, and orderly communities were established at every earliest opportunity, with the Church dominating all.

Except to some extent in the diamond and gold rush days of the 1870s and 1880s, when thousands of fortune-seeking "uitlanders" (foreigners) flocked into the country, South African history has had nothing resembling a "wild west" era. The Church also took upon it the task of education wherever it could be done, and if secular formal education was sometimes lacking, no one went without formal catechism and confirmation as a member of the Church, for which at least a degree of literacy was essential. In every settled community, however, the church was first established and then the school, and every town and hamlet in South Africa has its own interesting education story to tell.

STATE-AIDED EDUCATION

It was only in the nineteenth century that the idea of state-aided education began to take root, and in South Africa it was only towards the end of the century that the state began to assume full responsibility for secular education, even though De Mist had expressed himself in favour of state-aided secular schools at the very beginning of the century.

Lord Charles Somerset, one of the most renowned of British Governors at the Cape, instituted a system of secular schools after 1820, and in 1839 the first Superintendent-General of Education was appointed at the Cape. This step inaugurated a new and very significant era in education in the Cape and later in Natal, the Orange Free State and Transvaal. Schools were, however, still the business of local communities, but now they were subsidized, and also inspected, by the educational authorities. Even to-day, though education is fully controlled and financed by the various authorities, local bodies, school committees and school boards, still have some say, e.g. in the appointment of teachers, and to some extent in local control and organisation. Their most important function, however, is that of advising the authorities on local conditions and needs and of making requests in this connection.

The development of a state-aided educational system controlled by a central authority but with local bodies largely responsible for the actual work of education, also took place in the Transvaal, Natal and the Orange Free State, and after the Free State and the Transvaal had become British colonies in 1902, their first demand, apart from that for self-rule, was for local

control of education.

THE UNION OF SOUTH AFRICA

The movement towards the union of the four colonies culminated in the National Convention of 1909, where education was one of the most critical points of discussion. The Cape, Free State and Transvaal were more or less resigned to surrendering control of education to the proposed new Central Government and to the formation of a close Union. Natal, however, wanted a Federation and to retain control of, among others, its own education. Union was eventually established and came into being on 31 May 1910, with the Provinces retaining control of education, roads, local government and hospital services, and exercising this control through their Provincial Councils.

UNION DEPARTMENT OF EDUCATION

The Central Government, through its Union Department of Education, which since 1910 has had various titles and is now the Department of National Education, assumed control of "higher education". The definition of "higher education" has been a bone of contention practically up to the present day. University education was in its infancy, vocational education at school level hardly existed and technical education, what there was of it, was mostly in the hands of private technical institutions. The Provinces mainly concerned themselves with "ordinary" primary and secondary education and also trained their own teachers. Special education for the deviate and the handicapped of all kinds still had to come. Technical as well as special education is more expensive than "ordinary" education, and lack of funds was one reason why the Provinces moved slowly in these fields.

From 1912 onwards, through a series of discussions, agreements and laws, "higher education" came to mean pretty much everything the Provinces could not, would not or were not allowed to handle. The result was an unhappy horizontal as well as vertical division of educational control. The Provinces had "ordinary" primary and secondary education, retained agricultural schools and insisted (as they still do) on training their own teachers, especially those for the primary schools. The Union Department of Education had, or gradually appropriated, all university education, technical colleges (most of whose work was on secondary level), vocational, technical and commercial schools, industrial and reform schools for those committed to State care, domestic science schools, schools for the blind, deaf and otherwise handicapped, the training of secondary teachers at universities and technical colleges, and whatever else the Government and the

Minister of Education thought it should take care of. The Vocational Education Act of 1955, which at last gave the Department of Education, Arts and Science (as it was then called) full control of all tertiary education and educational institutions, even forbade the provinces to devote more than eight hours per week per class to commercial subjects in their schools. Almost miraculously, the provinces were allowed to establish their own schools for the mentally retarded.

This "divided control" caused a great deal of controversy, even strained relations, between the provinces and the Central Government and, all down the line, between those concerned with "ordinary" school education on the one hand and technical, commercial, vocational and special education on the other.

A NATIONAL SYSTEM OF EDUCATION

Movements for an integrated "national" system of education grew stronger, various official commissions brought out reports, and in 1962 the first National Advisory Education Council was set up to advise the government on all aspects of education and proposed educational reform. In 1967 came two major Acts, the Act on National Education Policy and the Act on Educational Services, followed in 1969 by an Act on the Training of Teachers. A new era in education in South Africa had dawned, or so it seemed.

From 1968 all forms of primary and secondary education within provincial boundaries were put under the control of the provinces, except special schools for the physically handicapped, industrial schools and reform schools, for which the Department of National Education retained responsibility. This Department also retained control of all tertiary (post-Senior Certificate) education, which means control of universities, colleges for advanced technical education, technical colleges, technical institutes, two colleges training nursery school teachers, a college of art and the South African Merchant Navy academy. The Department of Forestry has a College for foresters at Saasveld near George in the Cape Province. *

Control of teacher training, which is, after all, "higher" or tertiary education, remained a problem. An attempt was made to assign the training of all teachers to the Department of National Education and to incorporate existing provincial teacher training colleges with the universities, but the attempt did not succeed.

* See the HSRC publication The education of Whites in the Republic of South Africa.

The provinces still train their teachers for the primary school, but all training of secondary teachers has officially become the responsibility of the universities, which, however, also train primary teachers (degree courses) and all kinds of specialist teachers. As regards the training of teachers for technical and trade subjects there is a degree of co-operation between universities and colleges for advanced technical education, but whether this will last remains to be seen. Nursery school teachers are trained by universities, two special colleges of the Department of National Education and also to some extent by provincial teacher training colleges.

It seems likely that eventually all primary teachers will also be trained by the universities, probably incorporating or in collaboration with the provincial teacher training colleges. At least one university, the University of the Orange Free State, already has the provincial teacher training college attached to it.

Although there are still six bodies controlling education for Whites, viz the Department of National Education, the four provincial departments and the Department of Education of South-West Africa, there is now closer co-operation and consultation among them than ever before, through such bodies as the National Education Council, the Committee of Heads of Education and the Inter-departmental Advisory Committee on Educational Services. There is also the Joint Matriculation Board, which prescribes curricula, syllabi and standards to be attained for the Matriculation or university entrance examination. Furthermore, the provinces can no longer pass educational legislation as they see fit without consulting any authority outside the province. All provincial legislation and procedures must conform to the provisions of the various Acts, and the Minister of National Education must approve all legislation enacted by the provinces.

INDUSTRIAL AND TECHNICAL EDUCATION *

For approximately the first two and a half centuries of its existence the mainstay of the South African nation's economy was farming, and apart from professional people, officials, labourers, traders and artisans, everybody who was anybody was a farmer, and he was more or less lord of all he surveyed. Artisans were self-trained or trained by master artisans into whose service they went. Vocational education on any organized scale simply did not

* For more detailed information see the HSRC publications The education of Whites in the Republic of South Africa and Tertiary training outside universities and career opportunities.

exist, except in the very limited form of some industrial training for Coloureds in the Cape after 1855 and for Bantu in Natal after 1864.

Even though South Africa never developed a peasant class in the European sense, all the "farmers" were by no means well-to-do. Many were, indeed, poor, and gradually there developed a fairly numerous class called "bywoners", who were in a way "assistant farmers" or foremen to the wealthier landowners. This phenomenon spread across the country, and as the 19th Century and the first few decades of the 20th wore on, the country came to be saddled with what was called the "poor white" problem, which had many facets and only finally disappeared when South Africa became industrialized and prosperous. The problem was greatly aggravated by the Anglo-Boer war, (1899-1902) which left the majority of the inhabitants of the two former republics impoverished.

Since so many could no longer make a living on the land, they had to find other employment. This gave rise to the first attempts at industrial training, which were sporadic and unco-ordinated. The first industrial school was established by the Dutch Reformed Church at Uitenhage, near Port Elizabeth, in 1895. An agricultural training school for farm assistants and foremen was set up in Natal in 1914. The Orange Free State established an industrial school in 1898, two agricultural training schools in 1918 and two housecraft schools shortly afterwards. The first industrial school in the Transvaal was started at Potchefstroom in 1907.

Admission to these schools was originally mainly limited to the indigent and later industrial schools for delinquents were also established. The stigma of poverty and delinquency came to be attached to all "industrial" and "trade" schools and has to some extent stuck to this day, hampering development in this field.

Technical and commercial education came with industrial and mining development and the growth of the South African Railways. Especially after the Anglo-Boer War thousands of the rural poor found employment as labourers in the mines and on the railways, and as time went on, more and more flocked from the country to towns and cities to find a living. This migration began to gather momentum in the late 1920s and reached its peak in the 1930s during and after the great depression. Industrial and economic development in the last four decades has provided a living for all, to the extent that to-day South Africa experiences a "manpower shortage" in practically all fields.

The Railways started technical education in the form of evening classes at Salt River near Cape Town in 1890, and later at Kimberley, Uitenhage and East London. Similar classes were started by the Railways in Natal, the Orange Free State and the Transvaal. Out of these beginnings and the commercial and technical training started by other organizations, technical colleges originated, e.g. the Cape Technical College, which developed out of adult education classes started by the South African College in 1907, the Durban Technical College, founded in 1915, and the Pietermaritzburg Technical College, founded in 1924. Technical Colleges followed in other centres such as Johannesburg, Bloemfontein, Kimberley, East London and Port Elizabeth, all of them under the aegis of the Union Department of Education, especially after the promulgation of the "Higher Education Act" of 1923.

When the Union Department of Education finally took over all technical and other vocational education in 1925, it began to establish technical and commercial schools in addition to those taken over from the provinces, and in time also set up a number of apprentice schools in various centres, while all the technical colleges helped to train apprentices and technicians. In a number of centres "continuation classes" were started to enable persons in employment to acquire commercial or technical qualifications by attending classes after work. In many centres these classes have developed into what are called Technical Institutes, which in their turn may become fully fledged technical colleges.

In terms of the 1967 legislation certain colleges became Colleges for Advanced Technical Education, viz those at Cape Town, Durban, Pretoria and Johannesburg (the Witwatersrand Technical College). Two more followed, at Port Elizabeth and Vanderbijlpark (The Vaal Triangle College), while technical colleges remained at Stellenbosch, Pietermaritzburg, Welkom and Kroonstad (OFS), Bloemfontein, East London and Kimberley. In addition 19 apprentice schools were given the status of technical colleges and 34 technical institutes at present exist across the country.

SCHOOLS OF MINING

The first school of mining was opened at Kimberley in 1896. This was transferred to Johannesburg in 1903 and both the University of the Witwatersrand and the University of Pretoria eventually grew out of it. To-day the government maintains a number of training schools for miners, while all the large mining concerns have training institutions for mine officials, in collaboration with colleges for advanced technical education and even universities, especially those of the Witwatersrand and Pretoria.

PROGRESS IN TECHNICAL EDUCATION

Technical education in South Africa has come a long way indeed in the past fifty years, and the road ahead is full of promise, but it still has a long way to go. Of special importance is the development with regard to the colleges for advanced technical education whose special task it has become to train high quality technicians and technologists as well as professional, administrative and clerical personnel for commerce, industry and the State on tertiary level. These institutions as well as the technical colleges and technical institutes also perform an important task with regard to what is called "adult education", offering a great variety of ad hoc practical courses.

In 1969 the colleges for advanced technical education, technical colleges and technical institutes had a total enrolment of a little over 73 000. In 1975 this figure had grown to 107 810, composed as follows: Tertiary training: 35 528; pre-tertiary training: 19 827; adult education: 46 790. "Adult education" normally does not involve formal training and certification, and the pre-tertiary training involved here is mainly apprentice training. The number of 35 528 enrolled for tertiary training does not compare well with the total enrolment at residential universities of 71 722 in 1975, with another 30 936 enrolled at the non-residential University of South Africa. South Africa still to a large extent depends on immigration to fill the ranks of technicians and technologists for whom university training is not required or essential.

For full information on the present activities of these institutions and the facilities for study which they offer, the reader is referred to the HSRC publications Tertiary training outside universities and career opportunities, and Training and career opportunities for school-leavers before Std Ten.

CHAPTER 3

UNIVERSITY EDUCATION IN SOUTH AFRICA: A BRIEF HISTORY

University education in South Africa started on a humble scale with the establishment of the "South African College" at Cape Town in 1829. The College was really a superior kind of high school, but also prepared students for the matriculation and some more advanced examinations of the University of London. From that time on until 1874 a series of similar colleges, most of them under the aegis of either the Dutch Reformed Church or the Church of England, were set up in the Western and Eastern Cape, one in Bloemfontein and one in Pietermaritzburg. Universities eventually developed out of some of these colleges - the University of Cape Town out of the South African College, the University of Stellenbosch out of the Gymnasium, later the Victoria College, Rhodes University at Grahamstown out of St Andrews College, and the University of the OFS out of Grey College at Bloemfontein. The Huguenot Seminary at Wellington in the Cape developed into a University College, mainly for young ladies, but was closed down in 1950.

At Burgersdorp in the North-eastern Cape the Reformed Church (one of the Afrikaans Churches) founded a theological seminary in 1869. This was later moved to Potchefstroom in the Transvaal and out of it eventually came the present Potchefstroom University for Christian Higher Education. The theological seminary which the Dutch Reformed Church started at Stellenbosch in 1859 was later incorporated by the University of Stellenbosch.

All the other original colleges still exist today as well-known high schools: The South African College School (SACS) in Cape Town; Diocesan College, Rondebosch; The Paul Roos Gymnasium, Stellenbosch; St Andrew's College, Grahamstown; Grey High School, Port Elizabeth; Grey College School, Bloemfontein; Gill College School, Somerset East and the Pietermaritzburg High School. At Graaff-Reinet in the Great Karoo two high schools and a teachers' training college eventually emerged.

In 1858 a "Board of Public Examiners" was established at Cape Town to examine candidates from the various colleges. This was followed in 1873 by the University of the Cape of Good Hope, which received full university status but undertook no teaching. The teaching was done by the colleges, and their students were examined by the University. The Board of Public Examiners was incorporated in the University in 1874.

All the colleges did pre-matriculation as well as post-matriculation work. Gradually some of them either dropped the pre-matriculation work or developed into a college, which did post-matriculation teaching, and a separate school. By 1910 the following university colleges existed under the aegis of the University of the Cape of Good Hope: The South African College, Cape Town; The Victoria College, Stellenbosch; Rhodes University College, Grahamstown; Huguenot University College, Wellington; Grey University College, Bloemfontein; Natal University College, Pietermaritzburg; The South African School of Mines and Technology (later the University of the Witwatersrand), and the Transvaal University College, Pretoria. In 1919 the Potchefstroom University College was separated from the Theological Seminary of the Reformed Church.

After 1902, and especially after Union in 1910, the growth of university teaching was rapid and there was a great deal of controversy, discussion and investigation as to future development. The final result was the University Act of 1916, in terms of which the old University of the Cape of Good Hope would in 1918 be incorporated in a new university, the University of South Africa, which would have as constituent teaching colleges the Huguenot University College, Rhodes University College, Grey University College, the Transvaal University College, the South African School of Mines and Technology and the Natal University College. Two of the original colleges, the South African College and the Victoria College, were to become independent and in 1918 they became the University of Cape Town and the University of Stellenbosch.

A concomitant development was the setting up of the Joint Matriculation Board (JMB) to arrange and control the matriculation or university entrance examination, a function which had been performed by the University of the Cape of Good Hope for 45 years, and which the JMB still performs today (see the HSRC publication The education of Whites in the Republic of South Africa).

In 1921 the Potchefstroom University College was incorporated by the University of South Africa and in the same year the South African School of Mines and Technology became autonomous as the University of the Witwatersrand. The Transvaal University College became the University of Pretoria in 1931 and the Natal University College the University of Natal in 1949, with campuses at Pietermaritzburg and Durban, and Grey University College the University of the Orange Free State in 1950, while Rhodes University College became Rhodes University in 1951. In 1951 also the Potchefstroom University College, which since 1933 had been designated the Potchefstroom University College for Christian

Higher Education, became the Potchefstroom University for CHE. The Huguenot University College was closed down in 1950 and its campus taken over by the Dutch Reformed Church as the Huguenot College, a training institution for social and missionary workers.

UNIVERSITY TRAINING BY CORRESPONDENCE

With one of its constituent colleges closing down and all the others developing into independent universities, the University of South Africa was beginning to be left at a loose end and had to justify its continued existence. For some time it still incorporated the university colleges for Non-Whites, but all these have also become independent universities.

Ever since the foundation of the old University of the Cape of Good Hope, students who studied privately had the right to enter for the examinations of the university. This right was retained with regard to the University of South Africa and in time a large number of private correspondence colleges sprang up to assist students, not only those following university courses but also a great number trying to pass high school examinations. The university itself did not do any teaching by correspondence.

In South Africa with its large sparsely populated areas, its great distances and the difficulties experienced by many in their attempts to improve their education and qualifications, the need for such correspondence teaching by organizations capable of doing it properly became more and more apparent, until in 1945 the Council of the University of South Africa decided to establish a Department of External Studies which would not only guide students but also supply lectures by correspondence. This department was inaugurated in 1946 and soon proved to be a resounding success.

In 1951 legislation was passed to change the University of South Africa into a fully fledged correspondence university, and since then it has grown beyond all expectations. By 1954 it had over 5000 students of all population groups, by 1963 over 13 000, by 1970 nearly 22 000 and by 1971 over 25 000. By 1975 the total enrolment had grown to 40 197, comprising 30 936 Whites, 4 933 Blacks, 2 816 Asians and 1 512 Coloureds. By 1990 it is expected to have about 48 000 White students, with a probable total of well over 60 000. The university has a large and highly qualified academic staff of professors and lecturers and conducts examinations in about 700 centres in South Africa and other parts of the world.

NEW UNIVERSITIES

By 1951 South Africa had eight residential universities, four English medium, viz Cape Town, Witwatersrand, Rhodes and Natal, and four Afrikaans medium, viz Stellenbosch, Orange Free State, Pretoria and Potchefstroom.

A new university for the rapidly growing industrial area of Port Elizabeth and its surroundings seemed justified and the University of Port Elizabeth was established in 1965 as a dual medium institution. On the Witwatersrand (Johannesburg and surroundings) the need for a new Afrikaans medium university became apparent and the Rand Afrikaans University came into being in 1967. Both these have fully justified their foundation.

UNIVERSITY ENROLMENT OF WHITES

The residential universities, like the University of South Africa, have increased their enrolment tremendously in the past three decades. Their total was under 20 000 in 1950, 30 000 in 1960, 55 000 in 1970, 57 000 in 1971 and 71 722 in 1975. The total enrolment by 1990 is estimated at between 110 000 and 120 000. In 1966 South Africa had, per 100 000 of the population, the highest number of White students at tertiary level in the world, next to the USA.* The total number of students following post-matriculation or post-senior certificate courses at universities, colleges for advanced technical education and teacher training colleges, was 2100 per 100 000 of the population in 1966. By 1980 it will probably have increased to over 3000. The comparative figures for some other countries for 1966 were: USA 3245, Canada 1857, England and Wales 646, Scotland 958 and Australia 1256. These figures do not include correspondence students, and for South Africa the University of South Africa has also been excluded. The figure for the USA includes enrolment at the many Junior Colleges in the country.

The South African figure for White university enrolment as such was about 1000 per 100 000 of the population in 1960, and 1230 if the University of South Africa (Unisa) is included; for 1970 the respective figures were 1500 and 1900, for 1974 they were 1630 and 2280 and by 1990 they are expected to increase to about 2000 and 3000, which will probably make the RSA the country with the world's highest White student enrolment in proportion to the population.

* See UNESCO's Statistical Yearbook 1968.

UNIVERSITY FINANCE

Universities for Whites are dependent on the State for about four-fifths of their budget. Student fees contribute about 18 per cent and for the rest the universities rely on the support of private enterprise and their own efforts. The total amount of State support given to universities increased from R4,57 million in 1953/54 to R21,12 million in 1968/69 and to no less than R88,96 million in 1973/74. The training cost per student increased from about R200 in 1930 to R288 in 1950; R430 in 1960; R876 in 1970, and R1253 in 1973.

UNIVERSITY AUTONOMY

In spite of the heavy subsidy they receive, South African universities are by no means subservient to the State. They are autonomous within themselves and have complete "academic freedom" to teach what they think fit as they think fit in the interests of their alumni and their country. Like everyone else they have, of course, to observe the laws of the country.

South African students enjoy full democratic rights. They are free to form their own organizations, to protest against what they think wrong as long as they do not violate the law, and to negotiate with the authorities. Any form of subversive activity is, however, not tolerated.

EDUCATION OF NON-WHITE POPULATION GROUPS

After Union in 1910 the various provinces were also responsible for the education of Bantu, Asiatics and Coloureds within their boundaries. The various population groups attended separate primary and high schools, but these functioned under the same education authorities. There were also the private missionary schools, run by e.g. the Dutch Reformed Church, English Churches, the Lutheran Church and the Roman Catholic Church, with or without State subsidy.

As time passed, and especially since "separate development" became government policy, the notion gained ground that the various Non-White groups would be better off under their own education departments and ministries. A series of Acts to effect this followed. In 1953 came the Bantu Education Act, establishing the Department of Bantu Education. In 1963 the Coloured Persons Education Act put the control of the education of Coloureds under the Department of Coloured Affairs, now the Department of Coloured, Rehoboth and Nama Relations, and shortly afterwards the Department of Indian Affairs was given control of the

education of Indians.

Each of these ministries has a Department of Education with a Director and central offices, but control is decentralized, with regional directors and offices. This is desirable, especially in the case of the Bantu, with at least nine major and many minor ethnic groups and eight homelands, each of which has its own Department of Education.

Almost phenomenal progress has been made in the education of Non-White groups in the past few decades. Overwhelming proof of growth and development is evident on all educational levels - primary, secondary, vocational and tertiary - with regard to, for example, numbers enrolled, facilities provided on an increasing scale, eagerness on the part of the various groups to avail themselves of the opportunities offered and the increasing numbers reaching progressively higher standards of education. The following examples will illustrate this progress:

Enrolment at schools for Indians increased as follows between 1966 and 1975:

YEAR	PRIMARY	SECONDARY	TOTAL
1966	110 198	23 954	134 152
1975	134 032	48 154	182 186
Increase per cent 1966 - 1975	22%	101%	35%

The total school enrolment of Indian children in 1975 represented about 27 per cent of the total Indian population, which is indeed high.

The total enrolment at schools for Bantu increased from 747 026 in 1950 to 3 731 455 in 1975, a growth of 400 per cent. Between 1965 and 1974 the enrolments increased as follows:

YEAR	PRIMARY	SECONDARY	OTHER POST-PRIMARY	TOTAL
1965	1 883 990	66 568	7 278	1 957 836
1970	2 614 961	122 489	11 200	2 748 650
1974	3 276 742	209 519	17 817	3 573 975
Increase per cent 1965 - 1974	73%	214%	144%	80%

The secondary enrolment of Bantu is still low in comparison with the primary, but increased by 84 per cent from 1965 to 1970 and by 71 per cent between 1970 and 1974.

As regards the Coloureds the school enrolment increased as follows from 1963 to 1972:

YEAR	PRIMARY	SECONDARY	OTHER POST-PRIMARY	TOTAL
1963	327 585	36 989	2 934	367 508
1970	456 481	57 507	4 041	518 029
1972	493 093	68 529	3 746	565 368
Increase per cent 1963 - 1972	50%	85%	-	54%

UNIVERSITIES FOR NON-WHITES

Up to the time when separate facilities were created for them, Non-Whites did not attend university in any great numbers. They were admitted to the Universities of Natal, Rhodes, Cape Town and the Witwatersrand. In 1954 Cape Town had under 300 of them and the Witwatersrand about 200. A medical faculty for Non-Whites was established at the University of Natal in 1950 and in 1954 this university had just over 300 Non-White students, while Rhodes had a small number of them for post-graduate work. In addition there was the University College of Fort Hare which in 1954 had under 400 students. Altogether there were fewer than 1200 Non-White students at residential universities in that year, while the University of South Africa had a more or less equal number of them enrolled.

When it became clear that official policy was moving in the direction of separate university facilities for Non-Whites, there was a great deal of discussion, investigation, consultation and wrangling in political, academic and other circles, but eventually, in terms of the Transfer Act of 1969, the University College of Fort Hare was assigned to the control of the Minister of Bantu Education as an institution for the Xhosa group, and in quick succession the University College of the North was set up at Turfloop in the Northern Transvaal for the Sotho group, the University College of Zululand for the Zulu group in Natal, the University College of Durban for Indians and the University College of the Western Cape at Bellville near Cape Town for Coloureds.

Until they became independent universities, all these colleges wrote the examinations of the University of South Africa, and it was generally anticipated that it would take a long time for them to become autonomous. But it did not, after all, take so long. By January 1970 these colleges had become the University of the Western Cape, the University of Fort Hare, the University of Zululand and the University of the North, while the University College of Durban became the University of Durban-Westville in January 1971, a year later than the others, mainly because its new building complex could not be completed soon enough.

Enrolment at residential universities for Non-Whites increased as follows from 1961 to 1975:

YEAR	BANTU	COLOUREDS	ASIATICS	TOTAL
1961	519	288	114	921
1965	937	390	974	2 303
1970	2 022	852	1 642	4 516
1975	4 133	1 982	2 674	8 789
Increase per cent 1965 - 1975	340%	408%	175%	282%

The number of Non-White students enrolled at Unisa is also steadily increasing. The following table illustrates this growth between 1965 and 1975:

YEAR	BANTU	COLOUREDS	ASIATICS	TOTAL
1965	1 552	466	893	2 911
1967	1 861	524	1 019	3 404
1970	2 420	582	1 014	4 016
1975	4 933	1 512	2 816	9 261
Increase per cent 1965 - 1975	218%	224%	215%	218%

Apart from enrolment at Unisa and their own universities, Non-Whites still attend universities for Whites for courses not yet offered at their own universities, but their numbers are comparatively small, as will be illustrated by the figures below:

Non-White students enrolled at universities for Whites

YEAR	BANTU	COLOUREDS	ASIATICS	TOTAL
1965	145	333	747	1 225
1967	138	321	760	1 219
1970	167	379	818	1 364
1975	314	555	868	1 737
Increase per cent 1965 - 1975	116%	66%	16%	42%

The following table shows the growth in the total university enrolment of Non-Whites between 1965 and 1975:

YEAR	BANTU	COLOUREDS	ASIATICS	TOTAL
1965	2 634	1 189	2 614	6 437
1967	3 304	1 378	3 037	7 719
1970	4 609	1 813	3 474	9 896
1975	9 380	4 049	6 358	19 787
Increase per cent 1965 - 1975	256%	241%	143%	207%

There seems to be no valid reason why the university enrolment of Non-Whites cannot keep on increasing at the kind of rate indicated by the figures above. Naturally the growth per cent is likely to decline as the numbers grow larger, but it may rightly be averred that, in spite of the phenomenal developments that have taken place in the education of Non-Whites, particularly in the past decade, the upward trend in this field has really only started. The Bantu and the Coloureds in particular still have a long way to go, but the road to the future is becoming clearer.

The most recent development in the provision of university training for Blacks is the establishment of the Medical University of South Africa at Ga-Rankuwa near Pretoria, a huge complex comprising the Ga-Rankuwa Hospital and a university for training Blacks in Medicine, Dentistry and Veterinary Science.

When the new dispensation for the education of Non-White groups was put into effect in the 1950s and 1960s, there were many misgivings in many quarters, much derision, much talk of "inferior standards", "tribal colleges", "academic freedom" supposed to

have been violated and such, but the growth that "separate development" has brought about in education speaks for itself. Apart from the very satisfactory progress that the general education and training of Non-Whites is making, the new universities stand firmly on their own feet, are autonomous within themselves though under State control and financially wholly dependent on the State, maintain impeccable academic standards and render a service to their peoples which no other institutions can render as effectively under present circumstances.

Whether this kind of "separate development" will continue, or will need to continue, into the distant future, no-one can say to-day. The future itself will decide that.

CHAPTER 4

THE UNIVERSITIES OF SOUTH AFRICA

For Whites

Afrikaans medium universities

- University of the Orange Free State
- Potchefstroom University for Christian Higher Education
- University of Pretoria
- Rand Afrikaans University
- University of Stellenbosch

English medium universities

- University of Cape Town
- University of Natal
- Rhodes University
- University of the Witwatersrand

Dual medium university

- University of Port Elizabeth

Both media

- University of South Africa

For Bantu

- University of Fort Hare
- University of the North
- University of Zululand

For Coloureds

- University of the Western Cape

For Indians

- University of Durban-Westville

AFRIKAANS MEDIUM UNIVERSITIES

UNIVERSITY OF THE ORANGE FREE STATE

A Brief History

The history of this University dates back to 1855 when the Grey College was established by Sir George Grey, Governor of the Cape Colony and High Commissioner for South Africa. For fifty years this school was one of the most important high schools north of the Orange River, but students had to go to one of the colleges in the Cape Colony or to a university in Europe for post-matriculation study.

In November 1903 the Director of Education recommended that the Grey College should be moved to a plot of ground outside the city to allow for the expansion of the school as well as for a university college. The proposal was generally accepted and the Municipality of Bloemfontein donated a site of more than 150 morgen.

From 1904 onwards the higher classes of the Grey College developed in such a way that they formed the nucleus of a university college.

After the new school buildings had been completed in 1907 the original Grey College was divided into two institutions, viz the Grey University College and the Grey College School.

In terms of Act No. 12 of 1916 the Grey University College became a constituent college of the University of South Africa. The name of the University College was later changed by Act No. 6 of 1935 to "The University College of the Orange Free State".

An important milestone was reached with the amalgamation of the University College and the Training College for Teachers at the beginning of 1945. Today it is known as the Teachers' College of the UOFS.

On 18 March 1960 a long cherished ideal was realized when the University College was granted independent status and incorporated as the University of the Orange Free State.

In the past few years the University has grown rapidly. New departments and subjects have been added. From 1971 students can also receive training in Medicine.

Faculties and Departments : 1976

FACULTIES

Agriculture, Arts, Economic and Administrative Sciences, Education and the Teachers' College, Law, Medicine, Science, Social Sciences.

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURE

Agricultural Economics; Agricultural Engineering; Agrometeorology; Agronomy/Horticulture; Animal Science/Animal Anatomy and Physiology and Animal Diseases; Biometry; Dairy Science; Pasture Science; Plant Pathology; Small Stock Science; Soil Science.

FACULTY OF ARTS

Afrikaans and Nederlands; Anthropology; Applied Anthropology; Bantu Languages; Biblical Science; Communication; Dramatic Art and Theatrical Art; English; French; Geography; German; Greek; History; History of Art and Fine Arts; Latin; Librarianship; Music; Philosophy; Physical Education; Political Science; Semitic Languages.

FACULTY OF ECONOMIC AND ADMINISTRATIVE SCIENCES

Accounting, Cost Accounting and Auditing; Business Economics; Economics; Government and Municipal Administration; Income Tax; Industrial Psychology; Subdepartment Money and Banking; Transport Economics; Typing and Snelskrif (Shorthand).

FACULTY OF EDUCATION AND THE TEACHERS' COLLEGE

Faculty of Education

Educational Psychology; General Didactics; Historical and Comparative Education; Philosophy of Education.

The Teachers' College

FACULTY OF LAW

Constitutional Law and Legal Philosophy; Criminal Law and International Law; Mercantile Law; Private Law; Procedural Law; Roman Law and Legal History.

FACULTY OF MEDICINE

Anaesthetics; Anatomical Pathology; Anatomy; Biophysics; Cardio-Thoracic Surgery; Chemical Pathology; Dermatology; Diagnostic Radiology; Forensic Medicine; Haematology; Internal Medicine; Microbiology (Medical); Obstetrics and Gynaecology; Occupational Therapy; Orthopaedics; Paediatrics; Pharmacology; Physiology; Physiotherapy; Psychiatry; Radiotherapy; Surgery; Sub-department: Bio-engineering.

FACULTY OF SCIENCE

Applied Mathematics; Architecture; Astronomy; Biochemistry; Botany; Chemistry; Entomology; Genetics; Geology, Geochemistry and Geohydrology; Home Economics; Mathematics; Microbiology; Physics; Quantity Surveying/Building Administration; Statistics, Mathematical Statistics and Computer Science; Zoology.

FACULTY OF SOCIAL SCIENCES

Criminology; Industrial Sociology; Nursing; Psychology; Social Work; Sociology.

Enrolment : 1975

Male : 4 059 Female : 3 014 Total : 7 073

POTCHEFSTROOM UNIVERSITY FOR
CHRISTIAN HIGHER EDUCATION

A Brief History

The University developed out of the Literary Department of the Theological School of the Gereformeerde Kerk in South Africa which was founded on 29 November 1869 at Burgersdorp, C.P. This Department had its own special professor and young men were tutored for degrees of the University of the Cape of Good Hope.

As a result of a decision taken by the Synod of the Gereformeerde Kerk in April 1904, the Theological School and the Literary Department were transferred to Potchefstroom, where the Institution was opened in February 1905.

In April 1919 a government subsidy was received which caused the Literary Department to be separated from the Theological School. The Literary Department was then named the Potchefstroom University College for Christian Higher Education.

In 1921 the College was incorporated as a constituent college of the University of South Africa under the name of the Potchefstroom University College. In 1933 the name of the institution was changed by a private act to the Potchefstroom University College for Christian Higher Education.

The College made gradual but sound progress so that a private act was passed in 1950 proclaiming the College as from 17 March 1951 as an independent university retaining its Christian character.

Faculties and Departments : 1976

FACULTIES

Arts, Economic Sciences, Education, Law, Science (including Pharmacy), Theology.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

Afrikaans-Nederlands; Anthropology; Bantu Languages; Biblical Science; Communication and Journalism; Cultural Science; Development Administration; English; French and Italian; General Science of Linguistics and Science of Literature;

Geography/Physical Geography; German; Greek; History; History of Art and Fine Arts; Interfaculty Philosophy; International Politics; Latin; Librarianship; Music; Nursing; Philosophy, Ethics, Theory of Science and Logic; Political Science; Psychology; Semitic Languages; Social Work; Sociology and Criminology; Speech and Drama; Town and Regional Planning.

FACULTY OF ECONOMIC SCIENCES

Accounting and Auditing; Business Economics; Cost Accounting; Economics (Economics, Economic History and Money and Banking); Industrial and Personnel Psychology; Industrial Sociology; Interfaculty Philosophy.

FACULTY OF EDUCATION

Education : Empirical, Guidance and Special Education, Historical and Comparative, Practical and Tertiary Education, Theoretical; Physical Education; Interfaculty Philosophy.

FACULTY OF LAW

Criminal Law; Mercantile Law; Philosophy of Law (Interfaculty Philosophy); Private Law; Procedural Law and Law of Evidence; Public Law; Roman Law.

FACULTY OF SCIENCE

Biochemistry; Botany; Chemistry; Computer Centre and Computer Science; Electronic Services; Electrotechnics (Electrical Engineering); Geology; Home Economics; Industrial Chemistry; Instrument-making; Interfaculty Philosophy; Mathematics and Applied Mathematics; Microbiology and Hygiene; Natural Sciences - Course III; Pedology; Pharmaceutics; Pharmacology; Physical Geography; Physics; Physiology; Psychology; Statistics; Zoology.

FACULTY OF THEOLOGY

Apologetics, Ethics; Dogmatological Subjects; Ecclesiastical Law, Ecclesiastical History; Missiology; New Testament Subjects; Old Testament Subjects; Official Subjects.

Enrolment ; 1975

Male : 4 088 Female : 2 523 Total : 6 611

UNIVERSITY OF PRETORIA

A Brief History

The history of the University of Pretoria dates back to 1908 when university classes were established at Pretoria to provide instruction in Arts, Law and Science for the higher examinations of the University of the Cape of Good Hope. These classes were under the control of the Council of the Transvaal University College at Johannesburg.

In 1910 the Johannesburg section was incorporated as the South African School of Mines and Technology in Johannesburg while the Pretoria section retained the name of the Transvaal University College.

By Act No. 12 of 1916 the Transvaal University College became a constituent college of the University of South Africa.

By Act No. 13 of 1930 the Transvaal University College was incorporated as the University of Pretoria. The higher status was assumed on 10 October 1930.

The University has shown the most rapid growth of all the South African universities in recent years, and is today the largest residential university in this country.

Faculties and Departments : 1976

FACULTIES

Agriculture, Arts, Dentistry, Economic and Political Sciences, Education, Engineering, Law, Mathematics and Science, Medicine, Theology, Veterinary Science.

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURE

Agrarian Extension; Agricultural Economics; Animal Production; Biochemistry; Dairy Science; Horticulture; Microbiology and Plant Pathology; Plant Production; Soil Science and Plant Nutrition.

FACULTY OF ARTS

Afrikaans and Netherlands Cultural History; Afrikaans;

Anthropology; Archaeology; Bantu Languages; Bantu Law; Criminology; Drama; Economics; English; Geography; German; Greek; History; History of Art and Fine Arts; Latin; Librarianship; Mathematics; Music; Philosophy; Physical Education; Psychology; Public Administration; Romance Languages; Roman-Dutch and International Private Law; Roman Law and Jurisprudence; Semitic Languages; Social Work; Sociology; Speech Science, Logopedics and Audiology; Statistics and Computer Science.

FACULTY OF DENTISTRY

Conservative Dentistry and Pedodontics; Endodontics and Occlusal Rehabilitation; Maxillo, Facial and Oral Surgery; Oral Pathology and Oral Medicine; Orthodontics; Prosthetics and Dental Techniques.

FACULTY OF ECONOMIC AND POLITICAL SCIENCES

Accountancy and Auditing; Business Economics; Economics; Management; Mercantile and Industrial Law; Political Science and International Politics; Public Administration; Statistics and Computer Science.

FACULTY OF EDUCATION

Didactical Pedagogics; Fundamental Pedagogics; Historical and Comparative Pedagogics; Physical Education; Psychological Pedagogics, Sociological Pedagogics and Orthopedagogics; Subject Didactics.

FACULTY OF ENGINEERING

Agricultural Engineering; Chemical Engineering; Civil Engineering; Electrical Engineering; Electronic Engineering; Industrial Engineering; Materials Science and Metallurgical Engineering; Mechanical Engineering; Mining Engineering; Surveying and Town and Regional Planning.

FACULTY OF LAW

Bantu Law; Constitutional, Administrative and International Law; Criminal Law; Mercantile and Industrial Law; Procedural Law and Law of Evidence; Roman-Dutch Law and International Private Law; Roman Law and Jurisprudence.

FACULTY OF MATHEMATICS AND SCIENCE

Anatomy; Applied Mathematics; Architecture; Biochemistry; Botany; Chemistry (Inorganic and Analytical Chemistry; Physical, Organic and Theoretical Chemistry); Entomology; Geography; Genetics; Geology; Home Economics and Dietetics; Mathematics; Physics; Physiology; Quantity Surveying; Statistics and Computer Science; Zoology.

FACULTY OF MEDICINE

Anaesthetics; Anatomy; Cancer Chemotherapy; Chemical Pathology; Diagnostic Radiology; Family Doctor Practice; Forensic Medicine; Haematology; Infectious Diseases; Internal Medicine; Microbiology; Nursing; Obstetrics and Gynaecology; Ophthalmology; Orthopaedics; Otorhinolaryngology; Paediatrics; Pathological Anatomy; Pharmacology; Physiology; Preventive and Promotive Medicine; Psychiatry; Radiotherapy; Surgery.

FACULTY OF THEOLOGY

Section A - Dutch Reformed Church of Africa (Nederduitsch Hervormde Kerk van Afrika)

Church History; Dogmatics and Christian Ethics; New Testament Science; Old Testament Science; Practical Theology; Science of Religion and Science of Mission.

Section B - Dutch Reformed Church (Nederduits Gereformeerde Kerk)

Church History; Dogmatics and Christian Ethics; New Testament Exegesis and Theology; Old Testament Exegesis and Theology; Practical Theology; Science of Religion and Science of Mission.

FACULTY OF VETERINARY SCIENCE

Anatomy; Contagious Diseases; Genealogy; Medicine; Parasitology; Pathology; Physiology, Pharmacology and Toxicology; Surgery; Zootechnology.

Enrolment : 1975

Male : 10 903 Female : 4 486 Total : 15 389

R A N D A F R I K A A N S U N I V E R S I T Y

A Brief History

The Rand Afrikaans University was established in terms of Act No. 51 of 1966, which was passed by Parliament on 18 October 1966.

Because of the tremendous increase in the population of Afrikaans-speaking people on the Witwatersrand it had been found necessary to establish an Afrikaans medium university in Johannesburg. In 1947 there were only 6 Afrikaans medium high schools as against 26 English medium high schools on the Witwatersrand. Today there are 35 Afrikaans medium high schools and 33 English medium high schools. Thus 40% of the total Afrikaans-speaking pupils in the Transvaal are on the Rand.

It had also been found that in spite of the fact that there were two Afrikaans medium universities nearby (Pretoria and Potchefstroom) a large number of successful Afrikaans-speaking matriculants were unable to continue their studies because of financial reasons. With the establishment of an Afrikaans medium university on the Rand these matriculants would be able to attend the University as day students or as part-time students in the evenings.

The first lectures at the University commenced on 13 February 1968.

The University was officially opened on 24 February 1968.

Faculties and Departments : 1976

FAULTIES

Arts, Economic and Administrative Sciences, Education, Law, Science.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

Afrikaans-Nederlands; Anthropology; Bantu Languages; Bantu Law and Development Administration; Biblical Science; Classics; Communication; English; General Linguistics; Geography; German; History; History of Art; Library Science and Informatics; Philosophy; Political Science; Psychology; Romance Languages; Semitic Languages; Social Work; Sociology.

FACULTY OF ECONOMIC AND ADMINISTRATIVE SCIENCES

Accounting; Business Economics; Economics; Statistics;
Transport Economics.

FACULTY OF EDUCATION

Education; Nursing.

FACULTY OF LAW

Mercantile Law; Private Law; Public Law.

FACULTY OF SCIENCE

Biochemistry; Botany; Chemistry; Computer Science; Electrical Engineering; Experimental and Theoretical Physics; Geography; Geology; Mathematics; Mechanical and Civil Engineering; Statistics; Zoology.

Enrolment : 1975

Male : 1 511 Female : 982 Total : 2 493

U N I V E R S I T Y O F S T E L L E N B O S C H

A Brief History

The University of Stellenbosch had its origin in the Stellenbosch Gymnasium which was founded in 1866. The purpose of the Gymnasium was to provide a thorough school education and to prepare students for the Admission Examinations of the Theological Seminary and for the examinations in Arts and Science which were at that time directed by the Board of Examiners.

In 1873 the Board of Examiners was replaced by the University of the Cape of Good Hope, which became the new examining body. The demand for more advanced teaching, to keep pace with the advancing standards of the new University, was met at Stellenbosch by the establishment of a Faculty of Arts and a Faculty of Science, the so-called Arts Department, in 1874.

The distinction between school and university education became more pronounced, and in 1881 an Act of the Cape Parliament granted the Arts Department a charter with the status and constitution of the Stellenbosch College. In honour of Queen Victoria's Jubilee in 1887 the name of the College was changed to "The Victoria College of Stellenbosch".

In 1899 the Senior Matriculation class was also transferred to the school, thus giving the professors more time to devote to the more advanced classes.

On April 2 1918 the Victoria College was incorporated as the University of Stellenbosch under the University of Stellenbosch Act (Act No. 13 of 1916).

The late Mr Jan Marais of Coetzenburg bequeathed the sum of R200 000, thereby placing the University on a firm footing.

Faculties and Departments : 1976

FACULTIES

Agriculture, Arts, Commerce and Administration, Dentistry, Education, Engineering, Forestry, Law, Medicine, Military Science, Science, Theology.

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURE

Agricultural Economics; Agricultural Engineering; Agronomy and Pasture Science; Animal Science; Biometry; Enology; Entomology; Food Science; Genetics; Horticulture; Microbiology and Virology; Plant Pathology; Poultry Science; Sheep and Wool Science; Soil Science; Viticulture.

FACULTY OF ARTS

Africa Studies; Afrikaans Cultural Science and Folklore; Afrikaans-Nederlands; Bantu Studies: Anthropology, Bantu Languages; Biblical Science; Development Administration; Drama; English; Fine Art; French; General Linguistics; Geography; German; Greek; History; Italian; Latin; Librarianship; Music; Philosophy; Political Philosophy; Psychology; Semitic Languages; Social Work; Sociology; Town and Regional Planning.

FACULTY OF COMMERCE AND ADMINISTRATION

Accounting; Business Economics; Business Management and Administration; Economics; Industrial Psychology; Mercantile Law; Political Science and Public Administration; Shorthand and Typing; Statistics; Transport Economics.

FACULTY OF DENTISTRY

Conservative Dentistry; Dental Prosthetics; Maxillo, Facial and Oral Surgery; Oral Biology; Oral Medicine and Periodontology; Oral Pathology; Orthodontics.

FACULTY OF EDUCATION

Afrikaans; Didactics; Educational Administration, Comparative Education and History of Education in South Africa; Educational Psychology; English; Philosophy of Education and General Historical Education and Biblical Instruction; Physical Education; School Art; School Music.

FACULTY OF ENGINEERING

Applied Mathematics; Chemical Engineering; Civil Engineering; Electrical Engineering; Mechanical Engineering (including specializations in Construction of Machines; Aeronautical, Automobile, Marine, Production and Refrigeration Engineering).

FACULTY OF FORESTRY

Nature Conservation; Silviculture; Wood Technology.

FACULTY OF LAW

FACULTY OF MEDICINE

Anatomical Pathology; Anatomy; Comprehensive Medicine (Preventive and Social Medicine); Forensic Medicine; Medical Microbiology; Pharmacology; Physiology; Virology;

General Internal Medicine : Dermatology; Medical Biochemistry; Paediatrics; Psychiatry; Radiology;

General Surgery : Anaesthetics; Cardio-Thoracic Surgery; Neurosurgery; Ophthalmology; Orthopaedics; Otorhinolaryngology; Plastic Surgery; Urology.

FACULTY OF MILITARY SCIENCE

Accounting (Mil.); Aeronautics; Business Economics (Mil.); Chemistry (Mil.); Economics (Mil.); Geography (Mil.); History (Mil.); Mathematics (Mil.); Mercantile Law (Mil.) and Military Law; Naval Navigation; Physics (Mil.); Public Administration (Mil.) and Political Science (Mil.).

FACULTY OF SCIENCE

Biochemistry; Botany; Chemistry; Computer Science; Geology; Home Economics; Human and Animal Physiology; Mathematics; Physics; Zoology.

FACULTY OF THEOLOGY

Diaconological Subjects; Dogmatological Subjects; Ecclesiological Subjects; Missiology; New Testament Subjects; Old Testament Subjects.

Enrolment : 1975

Male : 6 457 Female : 3 285 Total : 9 742

ENGLISH MEDIUM UNIVERSITIES

U N I V E R S I T Y O F C A P E T O W N

A Brief History

The full title of the University is "The University of Cape Town, with which is incorporated the South African College".

The South African College was founded in 1829 as a private venture by the churches and citizens of Cape Town and its neighbourhood. Until 1874 it was a combined primary and secondary school with a few students of more advanced level. In that year the lower classes were separated from the College and were formed into the South African College School. In 1887 College House, the first university residence, was opened and in the same year women were admitted to the College. At the turn of the century a further step was taken towards attaining the university ideal

by the relegation of the two pre-matriculation years to the S.A. College School.

The years 1900-1918 saw many and rapid developments: the beginning of the Schools of Medicine, Engineering and Education, the opening of the Hiddingh Hall and Library, the first Women's Residence, the evening classes (from which the Cape Technical College originated), the formation of the Students' Representative Council, and finally the incorporation of the College in the University which was created by Act No. 14 of 1916.

In April 1918 the University came into being, endowed with one of the loveliest sites in the world, on Cecil Rhodes's estate at Groote Schuur. It also acquired R1 000 000, part left by Alfred Beit, and the remainder by his brother Otto and Sir Julius Wernher.

In 1922 and 1925 the University increased its scope by absorbing the S.A. College of Music and the Cape Town Schools of Fine Art and of Architecture.

In 1918 the University had some 600 students. The present enrolment is just over 9 000. Buildings and facilities are constantly being expanded and improved to keep pace with the growing number of students and their requirements.

Faculties and Departments : 1976

FACULTIES

Arts, Commerce, Education, Engineering, Fine Art and Architecture, Law, Medicine, Music, Science, Social Science, School of Environmental Studies.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

School of African Studies: African Languages, Archaeology, Social Anthropology;

Afrikaans and Nederlands; Classics; Cultural History of Western Europe; English Language and Literature; French Language and Literature; German Language and Literature; Hebrew Studies; History; Italian Language and Literature; Philosophy; Political Science; Religious Studies; Romance Studies; School of Economics: Economics, Economic History; School of Librarianship; Speech Training and Dramatic Art.

FAQLTY OF COMMERCE

Accounting; Business Science; Graduate School of Business.

FAQLTY OF EDUCATION

FAQLTY OF ENGINEERING

Chemical Engineering; Civil Engineering (including Water Resources and Public Health Engineering); Electrical Engineering; Land Surveying; Mechanical Engineering; Metallurgy and Materials Science.

FAQLTY OF FINE ART AND ARCHITECTURE

School of Architecture; Building Science; Quantity Surveying; Urban and Regional Planning; Michaelis School of Fine Art.

FAQLTY OF LAW

Commercial Law; Public Law; Roman and Comparative Law; Roman-Dutch Law; South African Private Law.

FAQLTY OF MEDICINE

Anaesthetics; Anatomy; Bacteriology; Bio-Engineering; Cardiac Surgery; Chemical Pathology; Clinical Science and Immunology; Dermatology; Forensic Medicine and Toxicology; Haematology; Infectious Diseases; Medical Physics; Medicine; Neurology; Neuro-Surgery; Nuclear Medicine; Obstetrics and Gynaecology; Ophthalmology; Oral and Dental Surgery and Jaw Injuries Unit; Orthopaedic Surgery; Otorhinolaryngology; Paediatrics and Child Health; Pathology; Pathological Laboratories; Pharmacology; Physical Medicine; Physiology and Medical Biochemistry; Plastic Surgery and Maxillo-facial Surgery; Psychiatry; Radiodiagnosis; Radiotherapy; Surgery; Thoracic Surgery; Urology; Venereology.

Paramedical Departments

Logopaedics; Occupational Therapy; Physiotherapy; Nursing Tuition.

FAQLTY OF MUSIC

College of Music; Ballet School; Opera School.

FACTULTY OF SCIENCE

School of Mathematical Sciences: Applied Mathematics; Com=puter Science; Mathematical Statistics; Mathematics;

Division of Physical Sciences: Astronomy;

School of Chemistry: Inorganic Chemistry; Organic Chemistry; Physical Chemistry; Theoretical Chemistry; Oceanography;

Division of Life Sciences: Biochemistry; Botany; Microbiology; Zoology;

School of Earth Sciences: Geochemistry; Geography; Mineralogy and Geology.

FACTULTY OF SOCIAL SCIENCE

Applied Sociology in Social Work; Psychology; Public Adminis=tration; Sociology; School of Social Work.

SCHOOL OF ENVIRONMENTAL STUDIES

Enrolment : 1975

	Male	Female	Total
Asiatics	82	15	97
Bantu	11	1	12
Coloureds	270	158	428
Whites	5 257	3 279	8 536
TOTAL	5 620	3 453	9 073

UNIVERSITY OF NATAL

A Brief History

The University of Natal developed out of the Durban Technical

Institute, which was founded in 1907 by private enterprise and later became the Natal Technical College, which in its turn became the matrix of university studies on the coast.

A University College Bill was promulgated on 11 December 1909 as Act No. 18 of 1909. The Natal University College (NUC) opened in Pietermaritzburg in February 1910 with 57 students. The first classes were held in Maritzburg College and were taught by its staff, the courses leading to the Intermediate and Final B.A. examinations of the University of the Cape of Good Hope.

The Pietermaritzburg Corporation donated forty acres of land at Scottsville and the first NUC building was opened in August 1912.

After the First World War the Natal University College was extended to Durban, where the Natal Technical College was already giving courses at university level in Engineering and Commerce. In 1922 the NUC took over responsibility for these courses and instituted others. In 1931 most of the classes of the Durban branch of the College moved to Howard College, donated by a Durban man whose son Howard had died in the Battle of the Somme. On 15 March 1949 the NUC became the University of Natal in terms of Act No. 4 of 1948, with campuses in Pietermaritzburg and Durban.

Faculties and Departments : 1976

FACULTIES

Agriculture, Architecture and Allied Disciplines, Arts, Commerce, Education, Engineering, Law, Medicine (for Non-White students only), Science, Social Science.

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURE

Agricultural Economics; Agricultural Engineering; Animal Science and Poultry Science; Biochemistry; Biometry; Crop Science; Entomology; Genetics; Home Economics and Dietetics; Horticultural Science; Pasture Science; Plant Pathology and Microbiology; Soil Science and Agrometeorology.

FACULTY OF ARCHITECTURE AND ALLIED DISCIPLINES

Architecture; Building; Quantity Surveying; Town and Regional Planning.

FAULTY OF ARTS

Afrikaans en Nederlands; Bantu Languages; Classics; Divinity; Economics; English; Fine Arts; French; German; Hebrew and Jewish Studies; Historical and Political Studies; History and Political Science; Library Science; Music; Philosophy; Speech and Drama.

FAULTY OF COMMERCE

Accountancy; Business Administration.

FAULTY OF EDUCATION

Education; Educational Psychology.

FAULTY OF ENGINEERING

Chemical Engineering; Civil Engineering; Electrical Engineering; Mechanical Engineering; Surveying.

FAULTY OF LAW

FAULTY OF MEDICINE

(This faculty caters for Non-White students only.)

Anaesthetics; Anatomical Pathology; Anatomy; Chemical Pathology; Community Health; Experimental and Clinical Pharmacology; Forensic Medicine; Gynaecology and Obstetrics;

Medicine : Sub-Departments : Cardiology; Dermatology; Physical Medicine;

Microbiology; Paediatrics and Child Health; Physiology; Psychiatry; Radiology;

Surgery : Sub-Departments : Neuro-Surgery; Ophthalmology; Orthopaedic Surgery; Otorhinolaryngology; Paediatric Surgery; Plastic and Reconstructive Surgery; Thoracic Surgery; Urological Surgery;

Virology;

University Diploma in Nursing Education.

FAULTY OF SCIENCE

Biological Sciences; Botany; Chemistry and Chemical Technology; Computer Science; Geography; Geology and Mineralogy; Mathematical Statistics; Mathematics and Applied Mathematics;

Physics; Psychology; Statistics and Biometry; Zoology.

FAULTY OF SOCIAL SCIENCE

African Studies; Nursing; Social Work; Sociology.

Enrolment : 1975

	Male	Female	Total
Asiatics	294	56	350
Bantu	190	64	254
Coloureds	53	26	79
Whites	4 985	2 201	7 186
TOTAL	5 522	2 347	7 869

R H O D E S U N I V E R S I T Y

A Brief History

The history of higher education in the Eastern Districts of the Cape Province dates back to 1855, when St Andrews College was founded in Grahamstown, combining the functions of a high school and those of a university institution and preparing students for degree examinations, for which, after 1873, the University of the Cape of Good Hope was the examining body. In 1878 a separate College Department was established and carried on university work for about 30 years.

Lack of funds hampered the foundation of a fully fledged university college, but as a result of financial support from the Rhodes trustees, the citizens of Grahamstown, public bodies in the Eastern Province and De Beers Consolidated Mines, Rhodes University College was established in 1904 and named after Cecil John Rhodes in acknowledgement of his munificent support of higher education.

In 1905 the classes were transferred to the Drostdy buildings, the site of which was purchased from the Government in 1909.

In 1918 Rhodes University College became a constituent college of the University of South Africa and on 10 March 1951 the independent Rhodes University in terms of the Rhodes University Act, 1949. In terms of this Act the South African Native College at Fort Hare (now the University of Fort Hare) became affiliated to Rhodes University in 1951. This affiliation lasted until 1959, when the University College of Fort Hare was transferred to the control of the Department of Bantu Education.

Faculties and Departments : 1976

FAULTIES

Arts (including Fine Art and Music), Commerce, Divinity, Education, Law, Science (including Pharmacy), Social Science.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

African Languages; Afrikaans/Nederlands; Anthropology; Classics; Divinity; Economics and Economic History; English; Fine Art; French and Italian; Geography; German; History; Journalism; Law; Librarianship; Linguistics; Mathematical Statistics; Mathematics (Pure); Music and Musicology; Philosophy; Physical Education; Political Studies; Psychology; Sociology; Speech and Drama.

FACULTY OF COMMERCE

Accounting; Commerce; Economics and Economic History; Law; Mathematical Statistics; Mathematics (Pure).

FACULTY OF DIVINITY

Systematic Theology; New Testament Language, Literature and History; Old Testament Language, Literature and History; Ecclesiastical History.

FACULTY OF EDUCATION

Education

FACULTY OF LAW

Law

FAULTY OF SCIENCE

Botany; Chemistry; Geography; Geology; Mathematical Statistics; Mathematics (Applied); Mathematics (Pure); Microbiology; School of Pharmaceutical Sciences; Physics; Psychology; Zoology and Entomology.

FAULTY OF SOCIAL SCIENCE

Anthropology; Economics and Economic History; Philosophy; Political Studies; Psychology; Social Work; Sociology.

Enrolment : 1975

	Male	Female	Total
Asiatics	28	17	45
Whites	1 313	1 012	2 325
TOTAL	1 341	1 029	2 370

UNIVERSITY OF THE WITWATERSRAND

A Brief History

The history of the University may be traced back to the establishment of the South African School of Mines at Kimberley in 1896. In 1904 the Transvaal Technical Institute was established in Johannesburg and the staff and students of the School of Mines were transferred from Kimberley to Johannesburg.

In 1905 the work of the Institute was extended by the provision of classes in Arts, Science and Law. This led, in 1906, to the adoption of the name "Transvaal University College". In 1907 the foundation of the new building in Eloff Street was laid and in the same year the College opened a branch in Pretoria with classes in Arts and Science. The two institutions were governed by a common council until 1910, when the Transvaal Legislature created two wholly separate institutions, the Transvaal University College in Pretoria and the South African School of Mines

and Technology in Johannesburg. For a time the School confined itself to conducting classes in Mining and Technology until in 1913 classes in Commerce were established.

In 1916 legislation was passed incorporating the University of South Africa and the School became a constituent college of the University of South Africa. The School was then granted powers to extend its courses into the fields of Arts and Science and classes commenced in 1917.

In July 1919 the first medical courses were offered and in 1920 Parliament passed legislation providing for the establishment of the "University College, Johannesburg". During its 1921 session Parliament passed the University of the Witwatersrand (Private) Act which became operative on 1 March 1922.

At the beginning of 1923 the University occupied its first teaching buildings at Milner Park, an 80 acre site donated by the City Council of Johannesburg. Since then the University buildings have increased greatly in number. Student enrolment has increased steadily from 1106 in 1923 to 10 660 in 1975.

Faculties and Departments : 1976

FACULTIES

Architecture, Arts, Business Administration, Commerce, Dentistry, Education, Engineering, Law, Medicine, Science.

ACADEMIC DEPARTMENTS

FACULTY OF ARCHITECTURE

Architecture; Building Science; Quantity Surveying; Surveying; Town and Regional Planning.

FACULTY OF ARTS

African Languages; Afrikaans and Nederlands; Applied Mathematics; Archaeology; Bibliography, Librarianship and Typography; Classics; Divinity; School of Dramatic Art; Economic History; Economics; Education; English; Fine Arts; Geography and Environmental Studies; German Studies and Comparative Literature; Hebrew Studies; History; History of Art; International Relations; School of Law; Mathematics; School of Music; Philosophy; Phonetics and General Linguistics; Political Studies; Psychology; Romance Studies (French, Italian,

Portuguese); Social Anthropology; Sociology; School of Social Work; Speech Pathology and Audiology.

FACTULTY OF BUSINESS ADMINISTRATION

Graduate School of Business Administration.

FACTULTY OF COMMERCE

Accounting; Business Economics; Economic History; Economics.

FACTULTY OF DENTISTRY

Conservative Dentistry; Experimental Odontology; General Anatomy; General Physiology; Maxillo-facial and Oral Surgery; Oral Medicine and Periodontology; Oral Pathology; Orthodontics; Prosthetic Dentistry.

FACTULTY OF EDUCATION

FACTULTY OF ENGINEERING

Chemical Engineering; Civil Engineering; Electrical Engineering; Mechanical Engineering; Metallurgy; Mining Engineering.

FACTULTY OF LAW

School of Law

FACTULTY OF MEDICINE

Anaesthesia; Anatomy; Experimental and Clinical Pharmacology; Forensic Medicine; Medical Physics; Medicine; Nuclear Medicine; Obstetrics and Gynaecology; Ophthalmology; Orthopaedic Surgery; Paediatrics; Physiological Chemistry; Physiology; Preventive and Social Medicine; Psychiatry and Mental Hygiene; Radiology (Diagnostic); Radiology (Therapeutic); School of Community Health;

School of Pathology: Pathology (Anatomical); Pathology (Chemical); Pathology (Haematological); Human Genetics; Pathology (Immunological); Pathology (Microbiological); Pathology (Virological);

Surgery.

Sub-departments: Nursing Education; Occupational Therapy; Physiotherapy.

FACULTY OF SCIENCE

Anatomy; Applied Mathematics; Archaeology; Biochemistry; Botany and Microbiology; Chemistry; General Anatomy; General Physiology; Genetics; Geography and Environmental Studies; Geology; Geophysics; Mathematics; Physics; Physiological Chemistry; Physiology; Psychology; Zoology.

Enrolment : 1975

	Male	Female	Total
Asiatics	315	61	376
Bantu	42	6	48
Coloureds	36	12	48
Whites	7 290	2 898	10 188
TOTAL	7 683	2 977	10 660

DUAL MEDIUM UNIVERSITY

UNIVERSITY OF PORT ELIZABETH

A Brief History

Act 1 of 1964, passed by Parliament on 31 January 1964, brought into being the University of Port Elizabeth.

With the purchase of a few adjoining properties - among others the building of the local branch of Rhodes University, the "Marine Hall" of the old museum and a private hotel - a functional campus for the initial years was acquired in Bird Street.

On 1 March 1965, the first academic year commenced with the registration of 320 students. In 1970 the registration figures topped the 1 000 mark for the first time; the official figure being 2 179 on 1 June 1975.

Towards the end of 1969 the physical planning of the new Summer=

strand campus reached finality and building operations began early in 1970. January 1974 saw the occupation of the new Summerstrand campus with all its facilities except the School of Architecture and Allied Disciplines, the Music Centre and certain subject committees of the Faculty of Science.

The first development phase of the University is expected to reach completion by the end of 1978.

Faculties and Departments : 1976

FACULTIES

Arts, Economic Sciences, Education, Law, Science.

ACADEMIC SUBJECT COMMITTEES

FACULTY OF ARTS

Afrikaans/Nederlands; Anthropology; Bantu Languages; Biblical Studies; English; French; General Linguistics; General Literary Theory; Geography; German; Greek; History; Latin; Music; Nursing Science; Philosophy; Political Science; Practical Music; Psychology; Public Administration; Semitica; Sociology; Social Work.

FACULTY OF ECONOMIC SCIENCES

Accountancy; Architecture; Building Science; Business Economics; Economics and Economic History; Industrial and Organizational Psychology; Quantity Surveying; Town and Regional Planning.

FACULTY OF EDUCATION

Didactical Pedagogics; Fundamental Pedagogics; Psychological Pedagogics; Professional Training of Teachers.

FACULTY OF LAW

Adjective Law; Mercantile Law; Private Law; Public Law.

FACULTY OF SCIENCE

Applied Mathematics; Biochemistry; Botany; Chemistry; Computer Science; Geology; Materials Science; Mathematics; Mathematical Statistics; Physics; Textile Science; Zoology.

Enrolment : 1975

Male : 1 490

Female : 689

Total : 2 179

BOTH MEDIA

THE UNIVERSITY OF SOUTH AFRICA

A Brief History

The University of the Cape of Good Hope was incorporated by an Act of the Legislature in 1873, and thereupon took the place of the Board of Public Examiners. The examinations hitherto held by the Board were replaced by examinations for the degrees of Master of Arts, Bachelor of Arts, Bachelor of Laws and for certificates in Law and in Land Surveying, and for Matriculation. Further Amendment Acts were passed empowering the University Council to confer other degrees as well, i.a. in Divinity in 1908.

In 1916 the Union Parliament passed three Acts, the effect of which was to reconstruct the whole of the South African University system. By Acts No. 13 and 14 of 1916 independent charters were granted to the Victoria College, Stellenbosch, and the South African College, Cape Town - two of the eight colleges which had hitherto prepared students for the degrees of the University of the Cape of Good Hope.

By Act No. 12 of 1916 the University of South Africa, with Pretoria as its seat, became the successor of the University of the Cape of Good Hope, and the following six colleges were incorporated with the University:

- (i) Grey University College, Bloemfontein
- (ii) Huguenot University College, Wellington
- (iii) Natal University College, Pietermaritzburg
- (iv) Rhodes University College, Grahamstown
- (v) Transvaal University College, Pretoria
- (vi) University College (then the South African School of Mines and Technology), Johannesburg.

By Act No. 15 of 1921, University College, Johannesburg, was incorporated as the University of the Witwatersrand and ceased to be a constituent college of the University of South Africa.

Potchefstroom University College was incorporated by Act No. 25 of 1921, and was made a constituent college of the University of South Africa.

Successive Acts of Parliament were passed granting independent charters to the various constituent colleges. By 1951 all the various institutions, with the exception of the Huguenot University College which ceased to exist as a university institution at the end of 1950, had assumed full university status.

Until 1946 the University was mainly a supervising and examining body. In that year, however, it assumed a new function when it was decided that the University would provide tuition to external students through the medium of the written word. This function has become its main activity.

Faculties and Departments : 1976

FAULTIES

Arts, Commerce and Administration, Education, Law, Science, Theology.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

Afrikaans en Nederlands; Anthropology; Bantu Languages (Ndonga (SWA), Northern Sotho, Southern Sotho, Tsonga, Tswana, Venda, Xhosa, Zulu); Classics; Communication; Criminology; Development and Administration Politics; English; Geography; German; History; History of Art and Fine Arts; Library Science; Linguistics; Musicology; Philosophy; Political Science and Public Administration; Psychology; Romance Languages (French, Italian, Portuguese, Spanish); Russian; Semitics; Social Work; Sociology.

FACULTY OF COMMERCE AND ADMINISTRATION

Accounting; Applied Accounting; Auditing; Business Economics; Economics; Industrial Psychology; School of Business Leadership.

FACULTY OF EDUCATION

Didactics and Comparative Education; Empirical Education; Fundamental Pedagogics; History of Education; Orthopedagogics.

FACULTY OF LAW

Constitutional Law; Criminal and Procedural Law; Legal History, Comparative Law and Legal Philosophy; Mercantile Law; Private Law.

FACULTY OF SCIENCE

Chemistry; Computer Science and Information Systems; Mathematics, Applied Mathematics and Astronomy; Physics; Statistics and Operational Research.

FACULTY OF THEOLOGY

Church History, Science of Mission and Science of Religion; Dogmatics, Ethics and Practical Theology; Old and New Testament.

Enrolment : 1975

	Male	Female	Total
Asiatics	2 366	450	2 816
Bantu	4 211	722	4 933
Coloureds	1 308	204	1 512
Whites	21 105	9 831	30 936
TOTAL	28 990	11 207	40 197

UNIVERSITIES FOR THE BANTU

U N I V E R S I T Y O F F O R T H A R E

A Brief History

The opening of Fort Hare University College on 8 February 1916, was the culmination of a long and persistent missionary endeavour in the field of Bantu education by the United Free Church of Scotland.

Fort Hare as a College, mainly for the Xhosa-speaking Blacks, had a very small and tentative beginning. While a few students were prepared for university entrance, the majority had to make good the deficiencies of their post-primary education or study for diplomas in Commerce and Agriculture.

The College was incorporated as an institution for higher education under the Education Act of 1923. Students were prepared for the degrees of the University of South Africa. They were registered as external students of the University. Eventually Fort Hare was allowed some of the privileges granted to the constituent colleges.

Although the College assumed the dual role of a secondary school and a university college from 1924, it was possible, by 1937, to concentrate on the studies of a higher education programme.

In March 1951 Fort Hare became affiliated to Rhodes University, 96 km away. Rhodes University controlled the syllabuses, courses of study, and examinations and awarded degrees until 1959. The University College of Fort Hare Transfer Act (Act No. 64 of 1959) provided for the transfer of the College to the control of the Department of Bantu Education.

The Act provided for the University of South Africa to act as examiner in all courses for which the syllabus of the University made provision.

A marked increase in enrolment has been maintained since the transfer. There is every reason to expect that this increase will be maintained and even surpassed during the following years. The Department of Bantu Education has already instituted a Planning Committee to plan in advance, and on a long-term basis, for the necessary expansion.

The University of Fort Hare Act (Act No. 40 of 1969) provided, inter alia, that from 1 January 1970 the University College was to become known as the University of Fort Hare; that it would serve the Xhosa national unit; and that the high standard of degrees of the University would be protected by the appointment, as additional members of the Senate, of professors of other universities, and also by a system of external examiners and/or moderators.

The Dutch Reformed Church's Centre for the training of Black ministers in Umtata, Decoligny, entered into an agreement with the University whereby Fort Hare degrees would be awarded to their students, as long as certain requirements were complied with.

From 1976 a branch of the University will be established at Umtata in the Transkei.

Faculties and Departments : 1976

FAULTIES

Agriculture, Arts, Economic Sciences, Education, Law, Science, Theology.

ACADEMIC DEPARTMENTS

FACTULTY OF AGRICULTURE

Agricultural Biological Sciences (Sub-departments: Biochemistry, Genetics and Microbiology); Agricultural Economics; Agricultural Engineering; Agronomy (Sub-departments: Crop Science and Pasture Science); Animal Science; Soil Science.

FACTULTY OF ARTS

African Studies (Anthropology, Archaeology and Development Studies and Administration); Afrikaans-Nederlands (and German); Bantu Languages (Xhosa and Southern Sotho); Communication; English; Fine Arts; Greek (including Principles of Greek Culture); History; Latin; Library Science; Philosophy; Political Science and Public Administration; Psychology; Sociology and Criminology; Social Work.

FACTULTY OF ECONOMIC SCIENCES

Accountancy; Business Economics and Co-operative Work; Economics; Industrial Psychology.

FACTULTY OF EDUCATION

Didactics and Comparative Education; Empirical Education and Orthopedagogics; Philosophy and History of Education; Department of Teaching Science; Department of Music.

FACTULTY OF LAW

Constitutional and Public International Law; Criminal Law and Procedure; Mercantile Law; Private Law.

FACULTY OF SCIENCE

Applied Computer Science; Applied Mathematics and Statistics; Botany; Chemistry; Geography; Geology; Land Surveying; Mathematics; Physics; Zoology.

FACULTY OF THEOLOGY

Ecclesiastical History and Missiology; New Testament Studies and Pastoral Theology; Old Testament Studies and Hebrew; Systematic Theology.

Enrolment

<u>Year</u>	<u>Number of students</u>
1968	451
1969	487
1970	613
1971	777
1972	942
1973	1 053
1974	1 029
1975	1 320

U N I V E R S I T Y O F T H E N O R T H

A Brief History

Towards the middle of the nineteen-fifties it was felt that the number of university institutions catering for Non-Whites should be extended, and thus the Extension of University Education Act (Act No. 45 of 1959) was passed to provide for the establishment of two additional university colleges for the Bantu, one for the Coloureds and one for Indians.

Thus the University College of the North was founded on 1 August 1959 as a university establishment to serve the Northern Sotho, Southern Sotho, Tsonga, Tswana and Venda communities. Although existing primarily for the above-mentioned ethnic groups, the institution has admitted students from other ethnic groups in Southern Africa. Thus there are students from South-

West Africa, Rhodesia and Malawi.

Parliament stipulated at the inception of the University College that it should fall under the academic trusteeship of the University of South Africa. This relationship functioned reasonably well. Then in 1969, the University of the North Act (Act No. 47 of 1969) made provision for academic independence, and on 1 January 1970 the relationship with the University of South Africa was dissolved and the University of the North came into being.

The University of the North is situated at Turfloop, thirty kilometres from Pietersburg in the Northern Transvaal. While a wide range of academic facilities is provided by the University, other aspects of student life such as sport and recreation are not neglected. Since 1959 a comprehensive building programme has been in progress. A spacious library, one of the best equipped pharmacy departments in the country, a language laboratory, various other auditoriums, lecture halls and laboratories have been erected to date, as well as a number of residences providing commodious accommodation to students.

Student numbers, which stood at only 87 in 1960, have grown to 1 695 in 1975.

The University of the North is at present the largest university for the Bantu in the Republic of South Africa.

In 1961 three degrees were awarded at the first graduation ceremony. This number grew to 172 in 1975.

Faculties and Departments : 1976

FACULTIES

Arts, Economics and Administration, Education, Law, Mathematics and Natural Sciences, Theology.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

African Government and Law; Afrikaans en Nederlands; Anthropology; Biblical Studies; Classical Languages; Economics; Sub-department Agricultural Economics; English; Geography; Sub-department Geology; German; History; Linguistics and Literary Studies; Mathematics; Northern Sotho; Philosophy;

Political Science; Private Law; Psychology; Public Administration; Public Law; Social Work; Sociology and Criminology; Southern Sotho; Tswana; Tsonga; Venda.

FACTULTY OF ECONOMICS AND ADMINISTRATION

Accounting and Auditing; African Government and Law; Business Economics; Computer Science; Economics; Sub-department Agricultural Economics; Mathematical Statistics; Political Science; Private Law; Psychology; Public Administration.

FACTULTY OF EDUCATION

Comparative Education; Didactics; Empirical Education; History of Education; Philosophy of Education; Language Bureau.

FACTULTY OF LAW

Accounting and Auditing; African Government and Law; Private Law; Public Law.

FACTULTY OF MATHEMATICS AND NATURAL SCIENCES

Applied Mathematics; Botany; Chemistry; Computer Science; Geography; Sub-department Geology; Mathematics; Mathematical Statistics; Nursing; Optometry; Pharmaceutical Chemistry; Pharmaceutics and Pharmaceutical Technology; Pharmacology; Physics; Psychology; Physiology; Zoology and Biology.

FACTULTY OF THEOLOGY

Church History, Science of Mission and Science of Religion; Dogmatics, Theological Ethics and Practical Theology; Old and New Testament Science.

Enrolment

<u>Year</u>	Number of students
1968	611
1969	671
1970	810
1971	901
1972	1 146
1973	1 274
1974	1 512
1975	1 695

UNIVERSITY OF ZULULAND

A Brief History

The University College of Zululand was established on 1 August 1959 in terms of the Extension of University Education Act, 1959 (Act No. 45 of 1959), in order to provide university education for the Zulu national unit.

On 8 March 1961 the College was officially opened by the Minister of Bantu Education.

The University College had a very small beginning. Only 41 students, of whom 36 were men, were registered for the first academic year, 1960. Rapid progress has, however, been made. In 1973, 979 students (683 men and 321 women) were registered. The academic and technical staff consisted of more than 100 members.

On 1 January 1970 the University obtained academic autonomy in terms of the University of Zululand Act, 1969 (Act No. 43 of 1969).

The University lies 141 kilometres North of Durban and 19 kilometres from Empangeni in a setting of great natural beauty.

Richards Bay, the new harbour town, lies within easy reach of the University, offering important facilities for the future.

Faculties and Departments : 1976

FAULTIES

Arts, Economic and Political Sciences, Education, Law, Science, Theology, Institute for Public Service Training.

ACADEMIC DEPARTMENTS

FAULTY OF ARTS

Afrikaans; Anthropology and Applied Anthropology; Bantu Languages; Biblical Studies; Classics; Criminology; English; Geography; German; History; Librarianship; Philosophy; Psychology; Social Work; Sociology.

FACULTY OF ECONOMIC AND POLITICAL SCIENCES

Accountancy and Auditing; Business Economics; Economics; Political Science and Public Administration; Industrial Psychology.

FACULTY OF EDUCATION

Didactics and Administration; Educational Psychology; History of Education; Philosophy of Education.

FACULTY OF LAW

Constitutional and Public International Law; Criminal and Procedural Law; Mercantile Law; Private Law; Roman and Zulu Law.

FACULTY OF SCIENCE

Applied Mathematics; Biochemistry; Botany; Chemistry; Geology; Mathematics; Physics; Zoology.

FACULTY OF THEOLOGY

Science of the Old Testament; Science of the New Testament; Church History; Dogmatics and Ethics; Missiology; Science of Religion; Diaconiology and Ecclesiastical Subjects.

INSTITUTE FOR PUBLIC SERVICE TRAINING

Public Administration; Organization and Method Study; State Finance and Auditing; Law.

Enrolment

<u>Year</u>	<u>Number of students</u>
1968	368
1969	428
1970	599
1971	701
1972	837
1973	979
1974	1 004
1975	1 118

UNIVERSITY FOR COLOURED

UNIVERSITY OF THE WESTERN CAPE

A Brief History

The University College was established in 1960 in terms of the Extension of University Education Act (Act No. 45 of 1959). A major aim with the establishment of this institution was to enhance the opportunities for Coloured students to obtain higher education.

For the first two years of its existence the College was housed in a primary school in Bellville South, but during 1962 it was possible to move into the attractive and efficiently planned new buildings for Science and Arts which had been erected on a spacious site situated between Bellville South and the D.F. Malan Airport. Since then more buildings have been erected and planning is well under way for other buildings and for extensions to existing buildings to provide for the growing number of students.

In terms of Act No. 50 of 1969, the College was granted academic autonomy as from 1970, which implies that as a university it may prescribe its own courses and syllabuses, conduct its own examinations and award its own degrees.

Faculties and Departments : 1976

FACULTIES

Arts and Philosophy, Commerce and Law, Dentistry, Education, Science, Theology.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS AND PHILOSOPHY

Afrikaans-Nederlands; Anthropology; Biblical Studies; English; Geography; Geology (incorporated in the Department of Geography); German; History; Latin; Library Science; Music; Nursing; Philosophy; Psychology; Social Work; Sociology.

FACULTY OF COMMERCE AND LAW

Accountancy; Economic Sciences and Public Administration; Mercantile Law and Public Law; Private Law.

FACULTY OF DENTISTRY

Anatomy and Hystology; Dental Prosthetics; Maxillo-facial and Oral Surgery; Microbiology; Pathology; Physiology and Physiological Chemistry; Restorative Dentistry.

FACULTY OF EDUCATION

FACULTY OF SCIENCE

Applied Mathematics; Botany; Chemistry; Mathematics; Mathematical Statistics (incorporated in the Department of Mathematics); Pharmacy; Pharmaceutical Chemistry; Physics; Physiology (incorporated in the Department of Zoology); Zoology.

FACULTY OF THEOLOGY

Ecclesiastical History; New Testament; Old Testament; Practical Theology; Systematic Theology.

Enrolment

<u>Year</u>	<u>Number of students</u>
1968	665
1969	805
1970	936
1971	934
1972	1 219
1973	1 600
1974	1 440
1975	1 982

UNIVERSITY FOR THE INDIANS

UNIVERSITY OF DURBAN - WESTVILLE

A Brief History

The University of Durban-Westville was originally the University College, Durban, which was established under the Extension of University Education Act (Act No. 45 of 1959), to prepare students

for the examinations and degrees of the University of South Africa. The University College, Durban, started in 1961 with 114 students following courses in the basic Arts and Sciences, and gradually expanded its services and academic disciplines as the student numbers increased.

As from January 1971 the University College was granted academic autonomy by virtue of the University of Durban-Westville Act, 1969 (Act No. 49 of 1969). This gave the University College the status of a university which sets its own examinations and confers its own degrees.

Faculties and Departments : 1976

FACULTIES

Arts, Commerce and Administration, Education, Law, Science.

ACADEMIC DEPARTMENTS

FAULTY OF ARTS

Afrikaans and Nederlands; Anthropology; Arabic, Urdu and Persian; Classical Languages; Criminology; English; Fine Arts; French; Geography and Geology; German; Hindi and Telugu; History; History of Art; Islamic Studies; Oriental Studies; Philosophy and Political Science; Psychology; Sanskrit and Indology; Science of Religion; Social Work; Sociology; Speech and Drama; Theology.

FAULTY OF COMMERCE AND ADMINISTRATION

Accounting and Auditing; Business Administration; Business Economics; Economics; Industrial Psychology; Public Administration; Statistics.

FAULTY OF EDUCATION

Empirical, Special and Remedial Education : Divisions :
Empirical Education; Special and Remedial Education; Logopedics and Speech Therapy; Science Education; Home Economics;
History of Education, Comparative Education and Educational Administration : Division : Mathematical Education;

Methodology of Education and Educational Technology : Divisions :
General Method; Language Studies; Speech Training;

Philosophy and Sociology of Education : Divisions : Commercial

Education; Social Studies; Practice Teaching;

Physical and Aesthetic Education : Divisions : Physical Education; Art Education; Music.

FACULTY OF LAW

Mercantile Law; Private Law; Public Law.

FACULTY OF SCIENCE

Biochemistry; Botany; Chemistry; Computer Science; Engineering; Mathematics and Applied Mathematics; Medical Rehabilitation; Microbiology and Hygiene; Pharmacy; Physics; Physiology; Zoology.

Enrolment

<u>Year</u>	<u>Number of students</u>
1968	1 407
1969	1 621
1970	1 654
1971	1 710
1972	2 003
1973	2 302
1974	2 342
1975	2 674

CHAPTER 5

FIELDS OF STUDY AT UNIVERSITIES AND QUALIFICATIONS TO BE OBTAINED

NOTE: In this chapter all the degrees, diplomas and certificates are mentioned which may be obtained in each faculty, but in most cases only the first degrees, diplomas and certificates are treated.

The universities which offer the degree, diploma or certificate are given in brackets in alphabetical order.

The list below denotes the abbreviation used for each university.

UCT	-	University of Cape Town
UDW	-	University of Durban-Westville
UFH	-	University of Fort Hare
UN	-	University of Natal
UNorth	-	University of the North
UOFS	-	University of the Orange Free State
UPE	-	University of Port Elizabeth
PU for CHE	-	Potchefstroom University for Christian Higher Education
UP	-	University of Pretoria
RAU	-	Rand Afrikaans University
RJ	-	Rhodes University
Unisa	-	University of South Africa
US	-	University of Stellenbosch
UWC	-	University of the Western Cape
UW	-	University of the Witwatersrand
UZ	-	University of Zululand.

FACULTY OF AGRICULTURE

AGRICULTURE

FOOD SCIENCE

AGRICULTURE

Universities: Fort Hare, Natal, Orange Free State, Pretoria, Stellenbosch.

Degrees

First degrees

Bachelor of Agriculture: B.Agric. (UFH, UOFS)

Bachelor of Science in Agriculture: B.Sc. Agric. (UFH, UN, UOFS)

Bachelor of Pedagogics: B.Ped. (UFH)

Bachelor of Agriculture: B.Sc. (Agric.) (UP)

B.Sc. in Agriculture (US)

Bachelor of Agriculture (Education): B.Agric. (Ed.) (UP)

Bachelor in Agricultural Education: B. in Agricultural Education (US)

Bachelor of Agricultural Management: B. in Agricultural Management (US) or B.Agric.Mgt. (UN)

Honours degrees

Bachelor of Science in Agriculture (Honours): B.Sc.Agric. (Hons.) (UFH, UOFS)

Bachelor of Agriculture (Honours): B.Agric. (Hons.) (UOFS)

Bachelor of Agriculture (Honours): B.Sc. (Agric.) (Hons.) (UP)

Hons. B.Sc. in Agriculture (US)

Bachelor of Agricultural Extension (Honours): B.Agric.Ext.(Hons.) (UFH)

Baccalaureus Honores Institutionis Agrariae: B.Inst.Agrar.(Hons.) (UP)

Hons.B. in Agricultural Management (US)

Master's degrees

Master of Science in Agriculture: M.Sc.Agric. (UFH, UN, UOFS)

Master of Agriculture: M.Agric. (UOFS)

Master of Agriculture: M.Sc.Agric. (UP)

M.Sc. in Agriculture (US)

Master of Agricultural Extension: M.Agric.Ext. (UFH)

Magister Institutionis Agrariae: M.Inst. Agrar. (UP)

M. in Agricultural Management (US)

Doctor's degrees

Doctor of Science in Agriculture: D.Sc.Agric. (UFH, UN, UOFS)

Doctor of Philosophy: Ph.D (UN)

Doctor of Agriculture: D.Sc.(Agric.) (UP)

Doctor Institutionis Agrariae: D.Inst.Agrar. (UP)

Ph.D. (Agriculture) (US)

D.Sc. in Agriculture (US)

Ph.D. (Agricultural Management) (US)

Bachelor of Science in Agriculture: B.Sc.Agric. or

Bachelor of Agriculture: B.Sc. Agric. or

B.Sc. in Agriculture

(All the above-mentioned universities)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Fort Hare: A pass in Mathematics on the Standard Grade.

Natal: A pass of at least 40 per cent on the Higher Grade or 50 per cent on the Standard Grade in both Mathematics and a Natural Science subject.

Orange Free State: A pass in Mathematics on the Standard Grade.

Pretoria: See p. 202.

Stellenbosch: A pass in Mathematics and Physical Science on the Standard Grade.

Duration: Four years of full-time study.

Bachelor of Agriculture: B.Agric.
(Fort Hare, Orange Free State)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Four years of full-time study (Fort Hare) or three years of full-time study (Orange Free State).

Bachelor of Pedagogics: B.Ped. (Fort Hare)

Admission: As for the B.A. degree.

Duration: Four years of full-time study.

See FACULTY OF EDUCATION p. 146.

Bachelor of Agriculture (Education): B.Agric.(Ed.)
(Pretoria) or

B. in Agricultural Education (Stellenbosch)

Admission: As for the B.Sc. Agric.

Duration: Four years of full-time study.

Bachelor of Agricultural Management: B.Agric.Mgt. (Natal)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass of at least 40 per cent in Mathematics on the Higher Grade or 50 per cent on the Standard Grade and a pass in a Natural Science subject with at least 33 per cent on the Higher Grade or 40 per cent on the Standard Grade.

Duration: Three years of full-time study.

Bachelor of Agricultural Management (Stellenbosch)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics and a science subject on the Standard Grade.

Duration: Three years of full-time study.

Baccalaureus Honores Institutionis Agrariae: B.Inst.Agrar.(Hons.)
(Pretoria)

Admission: Three- or four-year degree in Agriculture or B.Sc. (Eng.)(Agric.) or B.V.Sc. or B.Sc.(Home Economics) or B.Sc. (Dietetics) or B.Sc.(Forestry).

Duration: At least one academic year.

Diploma

The University of Fort Hare offers the Higher Secondary Teacher's Diploma with Agriculture as a specialization. See FACULTY OF EDUCATION p. 147.

FOOD SCIENCE

University: Stellenbosch.

Degrees

Bachelor of Science in Food Science: B.Sc. in Food Science

Honours Bachelor of Science in Food Science: Hons. B.Sc. in Food Science

Master of Science in Food Science: M.Sc. in Food Science

Doctor of Science in Food Science: D.Sc. in Food Science

Doctor of Philosophy: Ph.D. (Food Science)

Bachelor of Science in Food Science: B.Sc. in Food Science

Admission: As for the B.Sc. in Agriculture.

Duration: Four years of full-time study.

FACULTY OF ARCHITECTURE

Architecture is a separate faculty only at the Universities of Cape Town, Natal and the Witwatersrand. See Chapter 4.

ARCHITECTURE

BUILDING SCIENCE

LANDSCAPE ARCHITECTURE

QUANTITY SURVEYING

TOWN AND REGIONAL PLANNING

ARCHITECTURE

Universities: Cape Town, Natal, Orange Free State, Port Elizabeth, Pretoria, Witwatersrand.

Degrees

Bachelor of Architecture: B.Arch. (All the above-mentioned universities)

Master of Architecture: M.Arch. (All the above-mentioned universities)

Doctor of Architecture: D.Arch. (UN, UOFS, UPE, UP, UW)

Doctor of Science in Architecture: D.Sc. (Arch.) (UW)

Doctor of Philosophy: Ph.D. (UCT, UN, UW)

Bachelor of Architecture: B.Arch.

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade and a pass in a science subject (preferably Physical Science or Physics) on the Standard Grade.

Natal: Passes in Mathematics and Physical Science or Chemistry or Physics or Biology.

Orange Free State: See p. 201.

Port Elizabeth: A pass in Mathematics of at least 40 per cent on the Standard Grade.

Pretoria: See p.202.

Witwatersrand: A pass on the Higher Grade or at least 60 per cent on the Standard Grade in Mathematics and in one of the following subjects: Biology, Physical Science, Physiology.

Duration: Five years of full-time study and one year of practical experience under the supervision of the university.

BUILDING SCIENCE

Universities: Cape Town, Natal, Orange Free State, Port Elizabeth, Pretoria, Witwatersrand.

Degrees

First degrees

Bachelor of Building Science: B.B.Sc. (UCT)

Bachelor of Science in Building: B.Sc.Bldg. (UN)

Bachelor of Science in Building Administration: B.Sc. (Building Administration) (UQFS)

Bachelor of Building Arts: B.Boukunde (UPE)

Baccalaureus Scientiae in Building Management: B.Sc. (Bdg.Man.) (UPE)

Bachelor of Building Management: B.Sc. (Building Management) (UP)

Bachelor of Building Science: B.Sc. (Building Science) (UP)

Bachelor of Science in Building: B.Sc. (Building) (UW)

Master's degrees

Master of Science in Building Administration: M.Sc. (Building Admin.) (UQFS)

Master of Building Management: M.Sc. (Building Management) (UP)

Master of Science in Building: M.Sc.Bldg. (UN) or M.Sc. (Building) (UW)

Doctor's degrees

Doctor of Building Management: D.Sc. (Building Management)
(UP)

Doctor of Science in Building: D.Sc.Bldg. (UN) or D.Sc.
(Building) (UW)

Doctor of Philosophy: Ph.D. (UN, UW)

Bachelor of Building Science: B.B.Sc. (Cape Town)

Admission: As for the B.Arch. degree.

Duration: Four years of full-time study.

Bachelor of Science in Building: B.Sc.Bldg. (Natal)

Admission: As for the B.Arch. degree.

Duration: Four years of full-time study.

Bachelor of Science in Building Administration: B.Sc. (Building
Administration) (Orange Free State)

Admission: As for the B.Arch. degree.

Duration: Four years' study comprising two years of full-time
study followed by two years of part-time study, during which a
candidate must be employed full-time in the office of a
building contractor.

Bachelor of Building Arts: B.Boukunde (Port Elizabeth)

Admission: As for the B.Arch. degree.

Duration: Three years of full-time study. Successful candidates
can obtain the B.Arch. degree after two years of further study.

Baccalaureus Scientiae in Building Management: B.Sc.(Bdg.Man.)
(Port Elizabeth)

Admission: As for the B.Arch. degree.

Duration: Five years' study, comprising three years of full-time study followed by two years of part-time study during which a candidate must be employed full-time by a registered building contractor.

After successful completion of the first three years of study, the degree of Bachelor of Building Arts will be awarded.

Bachelor of Building Management: B.Sc. (Building Management)
(Pretoria)

Admission: As for the B.Arch. degree.

Duration: Five years' study, comprising two years of full-time study and three years of part-time study during which a candidate must be employed full-time with a registered employer in the building industry.

Bachelor of Building Science: B.Sc. (Building Science)
(Pretoria)

Admission: As for the B.Arch. degree.

Duration: Three years of full-time study.

Bachelor of Science in Building: B.Sc. (Building) (Witwatersrand)

Admission: As for the B.Arch. degree.

Duration: Four years of full-time study.

LANDSCAPE ARCHITECTURE

University: Pretoria.

Degrees

Bachelor of Landscape Architecture: B.L.

Master of Landscape Architecture: M.L.

Doctor of Landscape Architecture: D.L.

Bachelor of Landscape Architecture: B.L.

Admission: As for the B.Arch. degree.

Duration: Three years of full-time study and one year of full-time employment with a landscape architect or related industry during the fourth year of study.

QUANTITY SURVEYING

Universities: Cape Town, Natal, Orange Free State, Port Elizabeth, Pretoria, Witwatersrand.

Degrees

First degrees

Bachelor of Science (Quantity Surveying): B.Sc.(Q.S.) (UCT)

Bachelor of Quantity Surveying: B.Q.S. (UN)

Bachelor of Science in Quantity Surveying: B.Sc.(Q.S.)
(UOFS, UW)

Baccalaureus Scientiae in Quantity Surveying: B.Sc. (Q.S.)
(UPE)

Bachelor in Quantity Surveying: B.Sc. (Q.S.) (UP)

Master's degrees

Master of Quantity Surveying: M.Q.S. (UN)

Master of Science in Quantity Surveying: M.Sc.(Q.S.) (UOFS,
UW)

Magister Scientiae in Quantity Surveying: M.Sc.(Q.S.) (UPE)

Master in Quantity Surveying: M.Sc.(Q.S.) (UP)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UN, UW)

Doctor of Quantity Surveying: D.Q.S. (UN)

Philosophiae Doctor in Quantity Surveying: Ph.D. (UPE)

Doctor in Quantity Surveying: D.Sc.(Q.S.) (UP)

Doctor of Science in Quantity Surveying: D.Sc.(Q.S.) (UW)

Bachelor of Science (Quantity Surveying): B.Sc.(Q.S.) or

Bachelor of Science in Quantity Surveying: B.Sc.(Q.S.) or

Baccalaureus Scientiae in Quantity Surveying: B.Sc.(Q.S.) or

Bachelor in Quantity Surveying: B.Sc.(Q.S.)

(Cape Town, Orange Free State, Port Elizabeth, Pretoria)

Admission: As for the B.Arch. degree.

Duration: 5 years' study, comprising 2 years' full-time study and 3 years' part-time study, during which a candidate must be employed full-time with a registered quantity surveyor or employed in the office of a local or other government quantity surveying office.

Bachelor of Quantity Surveying: B.Q.S. (Natal)

Admission: As for the B.Arch. degree.

Duration: Four years of full-time study plus a period, normally one year, of practical experience.

Bachelor of Science in Quantity Surveying: B.Sc. (Q.S.)
(Witwatersrand)

Admission: As for the B.Arch. degree.

Duration: Four years of full-time study.

A student spends the long vacations working in the office of a registered quantity surveyor, or a quantity surveying office of a government department, provincial administration, or local authority.

TOWN AND REGIONAL PLANNING

Universities: Cape Town, Natal, Potchefstroom, Pretoria, Stellenbosch, Witwatersrand.

Degrees

First degrees

Bachelor of Town Planning: B.T.P. (UN)

Bachelor of Arts and Science (Planning): B.Art. et Scien.
(Planning) (PU for CHE)

Bachelor of Town and Regional Planning: B.Sc.(T. and R.) (UP)

Bachelor of Science in Town and Regional Planning: B.Sc.(T.R.P.)
(UW)

Master's degrees

Master of City and Regional Planning: M.C.R.P. (UCT)

Master of City Planning and Urban Design: M.C.P.U.D. (UCT)

Master of Science in Town and Regional Planning: M.Sc.T.P.
(UN) or M.Sc.(T.R.P.) (UW)

Master of Arts and Science (Planning): M.Art. et Scien.
(Planning) (PU for CHE)

Master of Town and Regional Planning: M.Sc.(T. and R.) (UP)
or

M. in Town and Regional Planning (US)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UN, UW)

Doctor Philosophiae: D.Phil. (PU for CHE, US)

Doctor of Town and Regional Planning: D.Sc.(T. and R.) (UP)
or D.T.R.P. (UW)

Doctor of Science in Town and Regional Planning: D.Sc.(T.R.P.)
(UW)

Bachelor of Town Planning: B.T.P. (Natal)

Admission: A Bachelor's degree.

Duration: Two years of full-time study.

Bachelor of Arts and Science (Planning): B.Art. et Scien.
(Planning) (Potchefstroom)

Admission: Matriculation Certificate or a Standard 10 Certificate
(Matriculation Exemption) with a pass in Mathematics on the
Higher Grade or at least a C symbol (60 per cent) on the Standard
Grade.

Duration: Four years of full-time study.

Bachelor of Town and Regional Planning: B.Sc. (T. and R.)
(Pretoria)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with passes in Mathematics and Physical Science.

Duration: Four years of full-time study.

Bachelor of Science in Town and Regional Planning: B.Sc. (T.R.P.)
(Witwatersrand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade.

Duration: Four years of full-time study.

Master of City and Regional Planning: M.C.R.P. (Cape Town)

Admission: A Bachelor's degree.

Duration: Two years of full-time study.

Master of City Planning and Urban Design: M.C.P.U.D. (Cape Town)

Admission: A degree in Architecture.

Duration: Two years of full-time study.

Master of Science in Town and Regional Planning: M.Sc. T.P.
(Natal)

Admission: A degree in Architecture, Building, Engineering, Land Surveying, Town Planning or Quantity Surveying.

Duration: One year of full-time research.

Master of Town and Regional Planning (Stellenbosch)

Admission: One of the following degrees:

- B.A. with at least one of the following as a major subject:
Geography A, Economics, Sociology, Business Economics
- B.Sc. with at least one of the following as a major subject:
Geography B, Geology, Mathematics
- B.Sc. in Agriculture (Agricultural Economics)
- B.Com.
- B.Admin.
- B.Eng. (Civil Engineering)
- B.Sc. in Forestry
- Bachelor's degree in Architecture
- Bachelor's degree in Surveying
- B.Econ.

Duration: Two years of full-time study.

Diplomas

Diploma of City and Regional Planning: Dip. C.R.P. (UCT)

Diploma of City Planning and Urban Design: Dip. C.P.U.D. (UCT)

Diploma of City and Regional Planning: Dip. C.R.P. (Cape Town)

Admission: Standard 10 Certificate and a diploma or professional qualification approved by the Senate.

Duration: Two years of full-time study.

Diploma of City Planning and Urban Design: Dip. C.P.U.D.
(Cape Town)

Admission: Standard 10 Certificate and a diploma or professional qualification in Architecture approved by the Senate.

Duration: Two years of full-time study.

FACULTY OF ARTS

ARTS
COMMUNICATION/JOURNALISM
FINE ARTS
LIBRARIANSHIP/LIBRARY SCIENCE
MUSIC
SPEECH AND DRAMA
SPEECH THERAPY AND AUDIOLOGY/
LOGOPAEDICS

ARTS

Universities: All the universities in the Republic of South Africa.

Degrees

Bachelor of Arts or Baccalaureus Artium: B.A.

Bachelor of Arts with Honours or Baccalaureus Artium Honores:
B.A.Hons.

Master of Arts or Magister Artium: M.A.

Doctor of Philosophy: Ph.D.

Doctor of Literature or Doctor Litterarum: D.Litt.

Doctor Philosophiae: D.Phil.

Doctor of Literature and Philosophy or Doctor Litterarum et
Philosophiae: D.Litt. et Phil.

Degrees in specialized fields

Bachelor of Arts in Personnel Management: B.A.(Personnel Manage-
ment) (UFH)

Baccalaureus Artium (Youth Leadership): B.A. (UPE)

Bachelor of Arts in Police Science: B.A.(Pol.) (Unisa)

Master of Arts in Clinical Psychology: M.A.(Clinical Psychology)
(UN, UOFS, UP, Unisa, US, UW)

Master of Arts in Counselling Psychology: M.A. (Counselling Psychology) (UOFS, UP, Unisa, US)

Magister Artium in Clinical Psychology: M.A. (Clin. Psych.) (UPE)

Magister Artium in Counselling Psychology: M.A. (Couns. Psych.) (UPE)

See FACULTY OF EDUCATION for degree and diploma courses for teacher training in the field of Arts.

Admission requirements for a first degree in the Faculty of Arts:
Matriculation Certificate of the Joint Matriculation Board, Pretoria, or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements of the universities:

Cape Town:

- A pass on the Higher or Standard Grade in at least five of the following subjects: Afrikaans, English, Mathematics, Biology, Physical Science, Bantu Languages, French, German, Greek, Hebrew, Italian, Latin, Nederlands, Portuguese, Spanish, Hindi, History, Geography, Music, Biblical Studies, Economics, Art.
- A pass on the Higher Grade or at least 50 per cent on the Standard Grade in either Mathematics or a language other than the official languages, or a pass with at least 50 per cent on the Higher Grade in one of the official languages.

Natal: Subjects passed must meet certain grouping requirements and include at least three on the Higher Grade and both official languages, at least one of which must be on the Higher Grade.

Port Elizabeth: For admission to the following courses a candidate must have attained the standard indicated in each case:

- Professional Afrikaans I: A pass in Afrikaans on the Higher or Standard Grade
- English I: A pass in English on the Higher or the Standard Grade
- German I: A pass of at least 45 per cent on the Higher Grade or at least 40 per cent if German had been taken on Mother-tongue level

- Latin I: A pass in Latin on the Higher or Standard Grade
- Mathematics I or Mathematical Statistics I: A pass of at least 40 per cent in Mathematics on the Higher or the Standard Grade.

Pretoria:

- A candidate must have obtained a pass on the Higher Grade in at least two of the following subjects: History, Geography, Mathematics, Biology, Physical Science, a third language: Provided that where a language is only offered on the Standard Grade, it will be recognized for this purpose.
- A candidate will not be admitted to the English IA course unless he obtained at least 50 per cent in English on the Standard Grade or a pass in English on the Higher Grade.
- A candidate will not be admitted to the French IA course unless he passed French in the Matriculation or Standard 10 examination.

Rand Afrikaans University:

- German I, French I, Latin I: A pass (40 per cent) in the corresponding Standard 10 subject on the Higher Grade; or if a candidate obtained a pass (at least $33\frac{1}{3}$ per cent) in the Standard 10 subject concerned on the Standard Grade, he may be admitted to the first-year course in that language if he follows the last part of the University's special course in that subject during the Summer Term and obtains a pass; or if he passes the special course in the language concerned at the University.
- Mathematics: A pass of at least 40 per cent on the Higher Grade.

Rhodes: A candidate may not take any course other than an introductory course in English, Latin, Greek, Afrikaans-Nederlands, French, German, Italian or an African language unless he has obtained a pass on the Higher or on the Standard Grade in that subject. In Latin, Greek, French, German, Italian and the African languages, candidates who have not matriculated in these subjects may take an introductory course. If a sufficiently high standard is reached in the examination, the candidates may be permitted to proceed direct to the second course in that language.

South Africa: For admission to a first degree course in any language except English, Afrikaans and Hellenistic Greek, a pass

is required in the corresponding language either on the Higher Grade or on the Standard Grade.

Stellenbosch: A pass in Mathematics on the Standard Grade is required should Statistics (half course) and Mathematics (half course) be included in the B.A. course.

Witwatersrand:

- (i) 50 per cent in English or Afrikaans or German or a Bantu language on the Higher Grade; and
- (ii) a pass on the Higher Grade in two of the following subjects not presented under (i): Afrikaans, Art*, Bantu language, Biology, English, French, Geography, German, Hebrew, History, Latin, Mathematics, Music**, Physical Science, Physiology.

Bachelor of Arts or Baccalaureus Artium: B.A.

Admission: See p. 90.

Duration: Three years of full-time study or four years of part-time study.

Curriculum: 10-12 courses with two major subjects.

Bachelor of Arts with Honours or Baccalaureus Artium Honores: B.A.Hons.

Admission: B.A. degree.

Duration: 1 year.

Curriculum: Advanced study in one of the major subjects for the B.A. degree.

* Only for admission as a candidate for the degree of B.A. in Fine Arts or (subject to the approval of the Joint Matriculation Board) to the degree of B.A. with the courses Fine Art I, II and III, History of Art I, II and III and Painting Techniques in the curriculum.

** Only for admission as a candidate for the degree of Bachelor of Music.

Baccalaureus Philosophiae: B.Phil. (Potchefstroom)

Admission: A Bachelor's degree provided that Philosophy is not one of the major subjects.

Duration: Two years of part-time study.

Bachelor of Philosophy: B.Phil. (Witwatersrand)

Admission: A first degree.

Duration: One year after an appropriate four-year bachelor's degree or two years after an appropriate three-year bachelor's degree.

The B.Phil. provides opportunities to pursue advanced interdisciplinary study in topics from more than one Department or more than one Faculty.

Diplomas

Diploma in Applied Linguistics (UFH)

Lower University Diploma in Bantuistics (PU for CHE)

University Diploma in Bantuistics (PU for CHE)

Diploma in Museology (UP)

Diploma in Developmental Studies (RAU)

Post-graduate Diploma in Translation (RU)

Diploma for Police (Unisa)

Diploma in Bantu Studies (Unisa)

Diploma in Translation (Unisa)

Diploma in Counselling Psychology (US)

Post-graduate Professional Diploma in Museology (US)

Diploma in Applied Linguistics (Fort Hare)

Admission: B.A. degree with either three courses in at least one of the following subjects: Afrikaans-Nederlands, Bantu Languages, English; or

two courses in at least two of the aforementioned subjects; or

two courses in linguistics; or provided the candidate has had at least three years' satisfactory high school teaching experience of one of the above-mentioned languages and has completed at least two courses in one of the said languages towards the degree of bachelor.

Duration: One year.

Lower University Diploma in Bantuistics, (Potchefstroom)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) or a Standard 10 Certificate with a first class pass.

Duration: Three years.

University Diploma in Bantuistics, (Potchefstroom)

Admission: An approved Bachelor's degree.

Duration: At least one year.

Diploma in Museology, (Pretoria)

Admission: A Bachelor's degree with a pass in one of the following: Afrikaans and Netherlands Cultural History III; History III; History of Art III; Anthropology III; Archaeology II; Botany III; Zoology III; Entomology III; Geology III.

Duration: One year of full-time study or eighteen months of part-time study.

Diploma in Developmental Studies, (Rand Afrikaans University)

Admission: Standard 10 Certificate with a first class pass.

Duration: Two years.

Post-graduate Diploma in Translation, (Rhodes)

Admission: A candidate must have been admitted to a degree approved for the purpose; or have been admitted to the status

of such degree; and have satisfied the requirements for the Translation Aptitude Test.

Duration: At least one year.

Diploma for Police (South Africa)

Admission: Standard 10 Certificate. The Diploma is intended for Police.

Duration: Three years.

Diploma in Bantu Studies (South Africa)

Admission: Standard 10 Certificate.

Duration: At least two years.

Diploma in Translation (South Africa)

Admission: A Bachelor's degree. A student must pass a translation test conducted by the Department of Linguistics.

Duration: At least one year.

Diploma in Counselling Psychology (Stellenbosch)

Admission: Graduates with Counselling Psychology III who are employed as counselling psychologists.

Duration: Three years' part-time study.

Post-graduate Professional Diploma in Museology (Stellenbosch)

Admission: A Bachelor's degree with one of the following as a major subject: Afrikaans Cultural Science and Folklore, Anthropology, Archaeology, Botany, Classical Culture, Entomology, Fine Arts, Geology, History, Library Science, Zoology.

Duration: At least one year of full-time study.

COMMUNICATION/JOURNALISM

Universities: Orange Free State, Potchefstroom, Rand Afrikaans University, Rhodes, South Africa, Stellenbosch.

Degrees

First degrees

Bachelor of Arts (Communication): B.A. (Communication)
(UOFS, PU for CHE)

Bachelor of Arts: B.A. (RAU, Unisa)

Bachelor of Journalism: B.Journ. (RU)

Honours degrees

Honours Bachelor of Arts (Communication): B.A.(Hons.) (Communication)
(UOFS)

Honours Bachelor of Arts: Hons.B.A. (RAU, Unisa)
or Honns.B.A. (PU for CHE)

Bachelor of Arts with Honours: B.A.(Hons.) (RU)

Hons.B.Journalism (US)

Master's degrees

Master of Arts (Communication): M.A.(Communication) (UOFS)

Master of Arts: M.A. (PU for CHE, RAU, RU, Unisa)

M. Journalism (US)

Doctor's degrees

Doctor Philosophiae: D.Phil. (UOFS, PU for CHE, US)

Doctor of Philosophy: Ph.D. (RU)

Doctor of Literature and Philosophy: D.Litt. et Phil. (RAU, Unisa)

Bachelor of Arts (Communication): B.A.(Communication), or

Bachelor of Arts: B.A. or

Bachelor of Journalism: B.Journ.

(All the above-mentioned universities except Stellenbosch)

Admission: As for the B.A. degree.

Duration: Three years of full-time study. Four years at Potchefstroom.

Diplomas

University Diploma in Communication (PU for CHE)

Post-graduate Diploma in Communication (RAU)

University Diploma in Communication (Potchefstroom)

Admission: An approved Bachelor's degree.

Duration: One year of full-time study or two years of part-time study.

Post-graduate Diploma in Communication (Rand Afrikaans University)

Admission: A Bachelor's degree.

Duration: Two years.

FINE ARTS

Universities: Cape Town, Durban-Westville, Fort Hare, Natal, Orange Free State, Potchefstroom, Pretoria, Rhodes, South Africa, Stellenbosch, Witwatersrand.

Degrees

First degrees

Bachelor of Arts in Art: B.A.(Art) (UCT)

Bachelor of Arts in Fine Art: B.A.(Fine Art) (UCT)

Baccalaureus Artium in Fine Arts: B.A.(F.A.) (UDW)

Bachelor of Arts in Fine Arts: B.A.(F.A.) or B.A. Fine Arts (UFH, UN, UQFS, PU for CHE, Unisa, US, UW)

Bachelor in Fine Arts: B.A.(F.A.) (UP)

Bachelor of Arts (Education)(Art): B.A.(Ed.)(Art) (UP) See
FACULTY OF EDUCATION p. 154.

Bachelor of Fine Art: B. Fine Art (RU) .

Honours degrees

Honoris Baccalaureus Artium in Fine Arts: B.A.(F.A.) Hons.
(UDW)

Honours B.A. in Fine Arts (US)

Master's degrees

Master of Arts in Fine Art: M.A. (Fine Art) (UCT)

Magister Artium in Fine Arts: M.A.(F.A.) (UDW)

Master of Arts in Fine Arts: M.A. Fine Arts (UN, UOFS,
Unisa, US, UW)

Master of Arts: M.A. (PU for CHE)

Master of Fine Arts: M.A.(F.A.) (UP)

Master of Fine Art: M.Fine Art (RU)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UW)

Doctor Philosophiae: D. Phil. (UDW, US)

Doctor Philosophiae (Fine Arts): D.Phil.(Fine Arts) (UOFS)

Doctor of Literature and Philosophy: D.Litt. et Phil. (Unisa)

Doctor of Literature: D. Litt. (UW)

The Universities of Cape Town, Durban-Westville, Fort Hare, Potchefstroom, the Rand Afrikaans University and the University of South Africa offer qualifying courses in History of Art in the B.A. curriculum. The University of Natal offers Fine Art as a major subject in the B.A. curriculum and the University of the Witwatersrand offers Fine Art and History of Art as major subjects for the ordinary B.A. degree.

Bachelor of Arts in Art: B.A.(Art) (Cape Town)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). Art on the Higher or Standard Grade would be a recommendation.

Duration: Four years of full-time study.

In their fourth year candidates are admitted to the course for the Secondary Teacher's Diploma, or that for the Post-graduate Primary Teacher's Diploma.

Bachelor of Arts in Fine Art: B.A. (Fine Art) or

Baccalaureus Artium in Fine Arts: B.A.(F.A.) or

Bachelor of Arts in Fine Arts: B.A.(F.A.) or B.A. Fine Arts or

Bachelor in Fine Arts: B.A.(F.A.) or

Bachelor of Fine Art: B. Fine Art

(All the above-mentioned universities)

Admission: As for the B.A. degree. Some universities require proof of practical ability in art.

Duration: Four years of full-time study. Three years of full-time study at the University of Fort Hare.

Diplomas

Diploma in Fine Art (UCT, UDW, RU, US)

Diploma in Graphic Design (UCT)

Advanced Diploma in Fine Art (UCT)

Diploma in Fine Arts: Dip. F.A. (UFH)

Diploma in the Fine Arts (UOFS)

The following universities offer a four-year teacher's diploma course with Art as one of the specializations: Fort Hare (three-year diploma), Natal, Orange Free State, Port Elizabeth, Potchefstroom. See FACULTY OF EDUCATION.

Diploma in Fine Art (Cape Town, Durban-Westville, Rhodes, Stellenbosch)

Admission: Standard 10 Certificate.

Duration: Three years (Cape Town, Durban-Westville and Stellenbosch) or four years (Rhodes) of full-time study.

Diploma in Graphic Design, (Cape Town)

Admission: Standard 10 Certificate or special aptitude for art.

Duration: Four years of full-time study.

Advanced Diploma in Fine Art, (Cape Town)

Admission: B.A. in Fine Art or B.A.(Art) or Diploma in Fine Art.

Duration: One year.

Diploma in Fine Arts: Dip.F.A., (Fort Hare)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

Diploma in the Fine Arts, (Orange Free State)

Admission: Standard 10 Certificate.

Duration: Three years. The curriculum and the syllabuses are the same as for the first three years of the B.A.(Fine Arts) degree.

Certificates

Certificate in Fine Art: Three-year course (UCT)

Post-Certificate in Graphic Design: One-year endorsement course after Diploma in Graphic Design (UCT)

LIBRARIANSHIP/LIBRARY SCIENCE

Universities: All the universities except the University of Port Elizabeth.

Degrees

First degrees

Baccalaureus Bibliothecologiae: B.Bibl. (UDW, UOFS, PU for CHE, UWC)

Bachelor in Library Science: B.Bibl. (UFH)
Bachelor of Pedagogics: B.Ped. (UFH)
Bachelor of Library Science: B.Bibl. (Unisa, UZ)
Bachelor in Librarianship: B.Bibl. (UP, RAU)
Bachelor in Librarianship (Education): B.Bibl. (Education)
(RAU) See FACULTY OF EDUCATION p. 156.
B. Librarianship (US)
Bachelor of Music (Librarianship): B.Mus.(Librarianship) (UCT)

Honours degrees

Honoris Baccalaureus Bibliothecologiae: B.Bibl. Hons. (UDW)
Bachelor in Library Science (Honours): B.Bibl.(Hons.) (UFH)
Honneurs Baccalaureus Bibliothecologiae: B.Bibl. (Hons.)
(UOFS) or Honns.B.Bibl. (PU for CHE)
Bachelor in Librarianship Honours: B.Bibl. (Hons.) (UP)
Honours Bachelor in Librarianship: B.Bibl. (Hons.) (RAU)
Honours Bachelor of Library Science: Hons.B.Bibl. (Unisa, UZ)
Hons.B.Librarianship (US)
Baccalaureus Bibliothecologiae Honours: B.Bibl.Hons. (UWC)

Master's degrees

M.A. in Librarianship (UCT)
Magister Bibliothecologiae: M.Bibl. (UDW, UOFS, PU for CHE,
UWC)
Master of Library Science: M.Bibl. (Unisa)
Master in Librarianship: M.Bibl. (UP, RAU)
M. Librarianship (US)

Doctor's degrees

Doctor Litterarum: D.Litt. (UP)
Doctor Philosophiae: D.Phil (UDW, UP, US)
Doctor of Library Science: D.Bibl. (Unisa)
Doctor Bibliothecologiae: D.Bibl. (UOFS, PU for CHE, UWC)

Bachelor in Library Science: B.Bibl. or

Bachelor of Library Science: B.Bibl. or

Bachelor in Librarianship: B.Bibl. or

B. Librarianship or

Baccalaureus Bibliothecologiae: B.Bibl.

(Fort Hare, Orange Free State, Potchefstroom, Pretoria, RAU,
Stellenbosch, Western Cape, Zululand)

Admission: As for the B.A. degree.

Duration: Four years of full-time study.

Baccalaureus Bibliothecologiae: B.Bibl. or

Bachelor of Library Science: B.Bibl.

(Durban-Westville, South Africa)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Four years.

The degree is taken in one of three directions, viz : Arts,
Science or Commerce.

Bachelor of Music (Librarianship): B.Mus.(Librarianship)
(Cape Town)

Admission: As for the B.Mus. degree,

Duration: Four years of full-time study.

Students who have completed all the work of the first three
years for the B.Mus. may be admitted in their fourth year to
the course for the Higher Diploma in Librarianship.

Bachelor of Pedagogics: B.Ped. (Fort Hare)

Admission: As for the B.A. degree.

Duration: Four years of full-time study. See FACULTY OF EDUCATION p. 146.

Diplomas

Lower Diploma in Library Science (UDW, UFH, UNorth, Unisa, UWC)

Lower Diploma in Librarianship (UCT, UOFS, PU for CHE, UP, RU, US, UZ)

Higher Diploma in Library Science (UDW, UFH, UN, UNorth, Unisa, UWC)

Higher Diploma in Librarianship (UCT, UOFS, PU for CHE, UP, RU, US, UW)

Post-graduate Diploma in Librarianship (RAU)

Final Diploma in Librarianship (UCT)

Higher Education Diploma (post-graduate)(School Librarianship) (PU for CHE) See FACULTY OF EDUCATION p. 153.

Certificate in School Library Science and

Diploma in Special Education: School Library Science (Unisa) See FACULTY OF EDUCATION p. 159.

Diploma in Specialized Education (School Librarianship) (US) See FACULTY OF EDUCATION p. 164.

Diploma in School Librarianship (UWC) See FACULTY OF EDUCATION p. 166.

The following universities offer a four-year teacher's diploma course with School Librarianship as one of the specializations: Orange Free State and Potchefstroom. See FACULTY OF EDUCATION.

Lower Diploma in Library Science: L.Dipl.Lib. (North)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Two years of full-time study.

The Diploma is offered in two fields, viz (i) Arts and (ii) Economics and Administration.

Lower Diploma in Library Science or

Lower Diploma in Librarianship

(All the above-mentioned universities except Natal, North, RAU and the Witwatersrand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). A few universities require only a Standard 10 Certificate.

Duration: Two years of full-time study.

Higher Diploma in Library Science, or

Higher Diploma in Librarianship or

Post-graduate Diploma in Librarianship

(All the above-mentioned universities except Zululand)

Admission: A Bachelor's degree other than in Library Science.

Duration: One year of full-time study or two years of part-time study. At RAU the course extends over two semesters and two summer terms for full-time study and four semesters and two summer terms for part-time study.

Final Diploma in Librarianship (Cape Town)

Admission: Higher Diploma in Librarianship.

Curriculum: Candidates must compile a special bibliography and submit evidence of two years' library service as a full-time member of a library staff.

MUSIC

Universities: Cape Town, Durban-Westville, Fort Hare, Natal, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, Rhodes, South Africa, Stellenbosch, Western Cape, Witwatersrand.

Durban-Westville, Natal, Potchefstroom, Rhodes and Stellenbosch offer Music (Practical Music) as a major subject for the B.A. degree.

Port Elizabeth, Potchefstroom, Pretoria, South Africa and the Witwatersrand offer History of Music as a major subject for the

B.A. degree.

Cape Town offers first and second year qualifying courses in Music for the ordinary B.A. degree.

Degrees

First degrees

Bachelor of Music: B.Mus. (UCT, UN, UP, RU, US, UW)

Baccalaureus Musicae: B.Mus. (UOFS, UPE, PU for CHE)

Bachelor of Musicology: B. Mus. (Unisa)

Baccalaureus Artium (Music): B.A.(Music) (UOFS)

Bachelor of Pedagogics: B.Ped. (UFH)

Bachelor of Arts (Education)(Music): B.A.(Ed.)(Music) (UP)

See FACULTY OF EDUCATION p. 154.

Bachelor's degree course in Primary Education with specialization in School Music (US) See FACULTY OF EDUCATION p. 163.

Baccalaureus Artium in Music: B.A.(Mus.) (UWC)

Honours degrees

Honours Bachelor of Music: B. Mus.(Hons.) (UP) or Hons.B.Mus. (US)

Honneurs-Baccalaureus Musicae: B.Mus.(Hons.) (UOFS) or Honns. B.Mus. (PU for CHE)

Honours Bachelor of Musicology: Hons.B.Mus. (Unisa)

Honneurs-Baccalaureurs Artium in Musicology: B.A.(Hons.)(Musicology) (UOFS)

Master's degrees

Master of Music: M.Mus. (UCT, UN, UP, RU, US, UW)

Magister Musicae: M.Mus. (UOFS, UPE, PU for CHE)

Master of Musicology: M.Mus. (Unisa)

Magister Artium in Musicology: M.A.(Musicology) (UOFS)

Doctor's degrees

Doctor of Music: D.Mus. (UCT, UN, UP, RU, US, UW)

Doctor Musicae: D.Mus. (UOFS, UPE, PU for CHE)

Doctor of Musicology: D.Mus. (Unisa)

Doctor of Philosophy: Ph.D. (UCT, RU)

Doctor Philosophiae in Musicology: D.Phil.(Musicology) (UOFS)

Bachelor of Music: B.Mus. or

Baccalaureus Musicae: B.Mus. or

Bachelor of Musicology: B.Mus.

(Cape Town, Natal, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, Rhodes, South Africa, Stellenbosch, Witwatersrand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: Candidates should have attained at least the equivalent of the standard required for one of the following examinations of the University of South Africa, the Associated Boards of the Royal Schools of Music and the Trinity College of Music:

B.Mus. (Performance): Grade VII

B.Mus. (Librarianship): Grade III

All other degree streams: Grade VI

For theory, new students should have passed one of the following examinations:

Unisa Harmony Grade V

Royal Schools Theory Grade VII

Trinity College Theory Grade VI

Orange Free State: A candidate must satisfy the head of the department of his proficiency in the performing art and of his musicality and general knowledge of music. He must have obtained at least 60 per cent in Music in the Std 10 examination or attained a standard in his practical major subject equivalent to the Grade VII Examination of the University of South Africa.

Port Elizabeth: A candidate must satisfy both the Chairman of the Subject Committee for Music and the Director of the Conservatoire that he has attained either a standard in practical music (any approved instrument or singing) equivalent to the Grade VII Examination of the University of South Africa or obtained a pass in Music in the Std 10 examination of at least 60 per cent on the Standard Grade or 50 per cent on the Higher Grade.

Potchefstroom: A candidate must satisfy the lecturers concerned in a practical test of his proficiency in the performing art and of his musicality and general knowledge of music, and he must have obtained a standard equivalent to the Advanced Certificate of the University of South Africa.

Pretoria: As for the B.A. degree. See p.91. A candidate must satisfy the lecturers concerned in a practical test at the beginning of the year that his proficiency in the performing art as well as his musicality and general knowledge of music justifies admission.

Rhodes: A candidate shall not be admitted in the Practical Subject III until he has satisfied all the requirements for the award of the Grade VIII Certificate in the corresponding subject of the Royal Schools of Music, or the University of South Africa, or Trinity College, London.

South Africa: A standard in practical music equivalent to that of Grade VII examination of the University of South Africa or that required for Music at the Matriculation or equivalent examination.

Stellenbosch: A pass in Music of at least 50 per cent on the Higher Grade or at least 60 per cent on the Standard Grade; or a pass in the practical major subject in the Grade VII Examination (University of South Africa) and a standard in Harmony equivalent to that of Grade VI (University of South Africa); or a pass in an admission examination, equivalent to the aforementioned examination, in the practical major subject and in Harmony.

Witwatersrand: A pass in Music on the Higher Grade. See also p. 92.

Duration: Four years of full-time study.

Baccalaureus Artium (Music): B.A.(Music) (Orange Free State)

Admission: As for the B.Mus. degree.

Duration: Three years of full-time study.

Bachelor of Pedagogics: B.Ped. (Fort Hare)

Admission: As for the B.A. degree.

Duration: Four years.

This is an integrated professional degree which may be taken with Music as one of the options. See FACULTY OF EDUCATION p. 146.

Diplomas

Cape Town

Performer's Diploma in Music

Performer's Diploma in Orchestral Playing

Performer's Diploma in Opera

Diploma in Ballet

Diploma in Choir Training

Teacher's Licentiate Diploma (School Music)
and

Teacher's Diploma in Music (Instrumental or Vocal)

See FACULTY OF EDUCATION p. 144.

Natal

Performer's Diploma - a one-year post-graduate course for either instrument or voice

Orange Free State

Artist's Diploma in Music

Diploma in Church Music

UOFS Performer's Licentiate in Music

UOFS Teacher's Diploma in Music
and

UOFS Teacher's Licentiate in Music See FACULTY OF EDUCATION
p. 150.

Port Elizabeth

Diploma in Musical Education See FACULTY OF EDUCATION p. 152

Diploma in Orchestral Playing

Soloist's Diploma in Music

Potchefstroom

Diploma for Church Organists

Lower University Diploma in Musical Performance

Potchefstroom University Teacher's Licentiate in Music See
FACULTY OF EDUCATION p. 153.

Pretoria

Diploma in Music (Individual Teaching) See FACULTY OF EDUCATION
p. 155.

Diploma in Music (Church Music)

Certificate in Church Music

Rhodes

Rhodes University Licentiate Diploma in Music: R.U.L.M.

Stellenbosch

Diploma for Church Organists

Performer's Licentiate in Music

Performer's Higher Licentiate in Music

Higher Education Diploma (Secondary - Music): H.E.D. (Secondary -
Music)

and

Teacher's Licentiate in Music

and

Higher Education Diploma (Primary) (School Music) See FACULTY
OF EDUCATION p. 162 and p. 164 respectively.

Western Cape

Diploma in Music Teaching

Witwatersrand

Licentiate in Music: L.M. See FACULTY OF EDUCATION p. 167.

Performer's Diploma in Music: P.Dip.Mus.

The following universities offer a four-year teacher's diploma
course with Music as one of the specializations: Port Elizabeth,
Potchefstroom, Pretoria, Witwatersrand. See FACULTY OF EDUCATION.

Performer's Diploma in Music

Performer's Diploma in Orchestral Playing

Performer's Diploma in Opera

Diploma in Ballet

Diploma in Choir Training (Cape Town)

Admission to above-mentioned diplomas: Standard 10 Certificate. Candidates who do not hold a Std 10 Certificate will be awarded a Certificate instead of a Diploma upon successful completion of the course.

Duration: Three years; exceptional proficiency may exempt students from the first year of the course.

Artist's Diploma in Music (Orange Free State)

Admission: B.Mus. degree or Education Diploma in Music or the UOFS Performer's Licentiate in Music or another adequate qualification plus evidence of candidate's ability as a performer through an entrance examination in the practical major subject.

Duration: One year after a B.Mus. degree or the UOFS Performer's Licentiate in Music and two years after the Education Diploma in Music.

Diploma in Church Music (Orange Free State) or

Diploma in Music (Church Music) (Pretoria) or

Diploma for Church Organists (Stellenbosch)

Admission: Standard 10 Certificate and evidence of proficiency in playing the organ as well as of sufficient musicality and general knowledge of music.

Duration: Three years of full-time study, but two years at the University of Stellenbosch.

Diploma for Church Organists (Potchefstroom)

Admission: Standard 10 Certificate and the Certificate for the Intermediate Organ Examination of the University of South Africa or an equivalent standard, and the Certificate for the Advanced Examination for the piano of the University of South Africa or an equivalent standard.

Duration: Three years of full-time study. This Diploma may be taken concurrently with the course for the B.Mus. degree.

UOFS Performer's Licentiate in Music (Orange Free State)

Admission: UOFS Teacher's Licentiate in Music.

Duration: One year.

Diploma in Orchestral Playing (Port Elizabeth)

Admission: B.Mus. degree or the Diploma in Musical Education. A candidate must satisfy the Deputy Director of the Conservatoire that he has attained a sufficient standard in an approved musical instrument to attend the course with profit.

Duration: One year of full-time study.

Soloist's Diploma in Music (Port Elizabeth)

Admission: As for the Diploma in Orchestral Playing.

Duration: Two years of full-time study.

Lower University Diploma in Musical Performance (Potchefstroom)

Admission: Standard 10 Certificate and evidence of proficiency.

Duration: One year.

The examination includes the recital of a complete concert programme.

Rhodes University Licentiate Diploma in Music: R.U.L.M.

Admission: Standard 10 Certificate, or the Board of the Faculty must be satisfied as to the candidate's suitability to take the course.

Duration: Three years of full-time study.

The Diploma may be awarded as a diploma for teachers, or for choirmasters, or for church organists.

Performer's Licentiate in Music (Stellenbosch)

Admission: Standard 10 Certificate and evidence of sufficient ability as performers. The minimum standard required is equivalent to the Grade VIII Examination of the University of South Africa.

Students must also give evidence in an entrance examination of sufficient knowledge of Harmony, or must have obtained a pass mark in Music of at least 60 per cent in the Std 10 examination, or have passed an examination in Harmony equivalent to the Grade VI Examination of the University of South Africa.

Duration: Three years.

Performer's Higher Licentiate in Music, (Stellenbosch)

Admission: B.Mus. degree or B.A. degree with Music as one of the major subjects or the Teacher's Diploma in Music, or the Teacher's Licentiate in Music, or the Performer's Licentiate in Music, or another qualification which the Senate regards as adequate. Students must give evidence in an entrance examination of sufficient ability as performers.

Duration: One year.

Performer's Diploma in Music: P.Dip.Mus., (Witwatersrand)

Admission: Diploma in Music, or a Licentiate in Music, or a B.Mus. degree, or a teacher's or performer's diploma or licentiate in music from a recognized institution and four years' experience in education or in public performance.

Duration: One year of full-time study or two years of part-time study.

SPEECH AND DRAMA

Universities: Cape Town, Durban-Westville, Natal, Orange Free State, Potchefstroom, Pretoria, Rhodes, Stellenbosch, Witwatersrand.

Degrees

First degrees

Bachelor of Arts with two courses in Drama: B.A. (UCT)

Baccalaureus Artium with Speech and Drama as a major subject:
B.A. (UDW)

Bachelor of Arts with Speech and Drama as a major subject: B.A.
(UN, RU)

Bachelor of Arts (Dramatic Art and Theatrical Art): B.A. (Drama-
tic Art and Theatrical Art) (UOFS)

Bachelor of Arts with Dramatic Art and Theatrical Art or
Speech and Interpretation and Theatrical Art as major subjects:
B.A. (PU for CHE)

Bachelor of Arts in Drama: B.A.(Drama) (UP)

Bachelor of Drama: B.Dram. (US)

Bachelor of Arts in Dramatic Art: B.A.(Dramatic Art) (UW)

Honours degrees

Honoris Baccalaureus Artium: B.A.Hons. (UDW)

Bachelor of Arts Honours: B.A.Hons. or Honns.B.A. (UN, PU for
CHE, RU)

Honours Bachelor of Arts (Dramatic Art and Theatrical Art): B.A.
(Hons.)(Dramatic Art and Theatrical Art) (UOFS)

Bachelor of Arts Honours in Drama: B.A.(Drama)(Hons.) (UP)

Honours Bachelor of Drama: Hons.B.Dram. (US)

Master's degrees

Magister Artium: M.A. (UDW)

Master of Arts: M.A. (UN, PU for CHE, RU)

Master of Arts (Dramatic Art and Theatrical Art): M.A.(Dramatic
Art and Theatrical Art) (UOFS)

Master of Arts in Drama: M.A.(Drama) (UP)

Master of Drama: M.Dram. (US)

Doctor's degrees

Doctor Philosophiae: D.Phil. (UDW, UP, US)

Doctor of Philosophy: Ph.D. (UN, RU)
Doctor Litterarum: D.Litt. (UOFS, PU for CHE)
Doctor of Literature: D. Litt. (UP, UW)

Bachelor of Arts (Dramatic Art and Theatrical Art): B.A.
(Dramatic Art and Theatrical Art) or

Bachelor of Arts in Drama: B.A.(Drama) or

Bachelor of Drama: B.Dram.

(Orange Free State, Pretoria, Stellenbosch)

Admission: As for the B.A. degree.

Duration: Three years of full-time study.

Bachelor of Arts in Dramatic Art: B.A.(Dramatic Art) (Wit=
watersrand)

Admission: As for the B.A. degree.

Duration: Four years of full-time study.

Diplomas

Performer's Diploma in Speech and Drama (UCT)

Specialist Actor's Diploma in Speech and Drama (UCT)

Specialist Teacher's Diploma in Speech and Drama
and

Special Endorsement for Holders of Primary Teachers' Certificates
(UCT) See FACULTY OF EDUCATION p. 144.

Diploma in Play Production (UN)

Diploma in Dramatic Art and Theatrical Art (UOFS)

University Diploma in Speech and Drama (PU for CHE)

University Diploma in Theatrical Art (PU for CHE)

Diploma for Stage Managers (US)

Higher Education Diploma (Primary) (Speech and Drama) (US)
See FACULTY OF EDUCATION p. 164.

The University of the Orange Free State offers the Higher
Education Diploma (Non-graduate) with Dramatic Art and Theatrical
Art as a specialization. See FACULTY OF EDUCATION p. 149.

Performer's Diploma in Speech and Drama (Cape Town)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with an aggregate of at least 50 per cent. A Std 10 Certificate may be accepted. A student must have shown marked talent as a performer.

Duration: Three years of full-time study; four years if taken together with a B.A. degree course.

Specialist Actor's Diploma in Speech and Drama (Cape Town)

Admission: B.A. degree with either two courses in Drama or three courses in English and an audition with a member of the Speech and Drama Department.

Duration: One year.

Diploma in Play Production (Natal)

Admission: Bachelor's degree with Speech and Drama as a major subject.

Duration: One year of full-time study or two years of part-time study.

Diploma in Dramatic Art and Theatrical Art or

University Diploma in Speech and Drama

(Orange Free State, Potchefstroom)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

University Diploma in Theatrical Art (Potchefstroom)

Admission: Bachelor's degree with Theatrical Art as a major subject or the University Diploma in Speech and Drama or an equivalent.

Duration: One year.

Diploma for Stage Managers (Stellenbosch)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

SPEECH THERAPY AND AUDIOLOGY/LOGOPAEDICS

Universities: Cape Town, Durban-Westville, Natal, Pretoria, Witwatersrand.

Degrees

First degrees

Bachelor of Science (Logopaedics): B.Sc.(Logopaedics) (UCT)

Baccalaureus Artium in Logopaedics: B.A.(Logopaedics) (UDW)

Bachelor of Arts in Speech Therapy and Audiology: B.A.(Log.) (UP)

Bachelor of Arts in Speech and Hearing Therapy: B.A.(Sp. & H. Therapy) (UW)

Master's degrees

Magister Artium in Logopaedics: M.A.(Logopaedics) (UDW)

Master of Arts in Speech Therapy and Audiology: M.A.(Log.) (UP)

Master of Arts: M.A. (UW)

Master of Arts in Audiology: M.A.(Audiology) (UW)

Master of Arts in Speech Pathology: M.A.(Speech Pathology) (UW)

Doctor's degrees

Doctor Philosophiae: D. Phil. (UDW)

Doctor of Philosophy: D.Phil. (UP)

Doctor of Philosophy: Ph.D. (UW)

Doctor of Literature: D.Litt. (UW)

Bachelor of Science (Logopaedics): B.Sc.(Logopaedics), or

Baccalaureus Artium in Logopaedics: B.A.(Logopaedics), or

Bachelor of Arts in Speech Therapy and Audiology: B.A.(Log.), or

Bachelor of Arts in Speech and Hearing Therapy: B.A.(Sp. & H. Therapy)

(Cape Town, Durban-Westville, Pretoria, Witwatersrand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: A pass in Mathematics on the Higher Grade or 50 per cent on the Standard Grade. Biology is recommended for the Std 10 examination.

Durban-Westville: A pass in Mathematics or a science subject on the Higher Grade.

Pretoria: As for the B.A. degree. See p. 91.

Witwatersrand: A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade. Also see p. 92.

Duration: Four years of full-time study.

Diplomas

Diploma in Speech Therapy (Logopaedics) (UN)

Diploma for Therapists (Special Education): D.T.S.E. (Unisa)
See FACULTY OF EDUCATION p. 161.

Diploma in Speech Therapy (Logopaedics), (Natal)

Admission: Bachelor's degree with Speech and Drama as a major subject.

Duration: Two years of full-time study or three years of part-time study.

FACULTY OF COMMERCE

This Faculty has different names at different universities.
See Chapter 4 under FACULTIES of the various universities.

COMMERCE
ACCOUNTANCY/ACCOUNTING SCIENCE
ADMINISTRATION
BUSINESS ADMINISTRATION (Post-graduate)
BUSINESS LEADERSHIP (Post-graduate)
BUSINESS SCIENCE
ECONOMICS
MARKETING
PERSONNEL LEADERSHIP/MANAGEMENT
TAXATION

COMMERCE

Universities: All the universities in the Republic of South Africa.

Degrees

First degrees

Bachelor of Commerce: B.Com. or B.Comm. or
Baccalaureus Commercii: B.Com. or
Bachelor of Economic and Administrative Sciences: B.Com. (RAU)
Bachelor of Commerce & Law: B.Com., LL.B. (UCT)
Bachelor of Commerce with Law subjects (UDW, US)

Honours degrees

Bachelor of Commerce (Honours): B.Com.(Hons.) or B.Com.Hons.
or B.Comm.(Hons.) or
Honours Bachelor of Commerce: Hons.B.Com. or
Bachelor of Commerce with Honours: B.Com.Hons. or

Honoris Baccalaureus Commercii: B.Com. Hons. or

Honours Bachelor of Economic and Administrative Sciences: B.Com. Hons. or

Honneurs Baccalaureus Commercii: B.Com.(Hons.)

Master's degrees

Master of Commerce: M.Com. or M.Comm. or

Magister Commercii: M.Com. or

Master of Economic and Administrative Sciences: M.Com.

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW)

Doctor of Commerce: D.Com. or D.Comm. or

Doctor Commercii: D.Com. or

Doctor of Economics: D.Econ. or

Doctor of Economic and Administrative Sciences: D.Com.

B.Com. or B.Comm.

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements of the universities:

Cape Town: A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade.

Durban-Westville: A pass in Mathematics on the Higher Grade, except in the case of students who have matriculated with an aggregate of 60 per cent or higher.

Fort Hare: Prospective students are advised to take Commercial Matric as direction of study.

Natal: A pass of at least 40 per cent in Mathematics on the Higher Grade or the equivalent in Mathematics on the Standard Grade.

North: A knowledge of Std 10 Mathematics is desirable.

Orange Free State: A pass in Mathematics on at least the Standard Grade.

Port Elizabeth: A pass of at least 40 per cent in Afrikaans and English on the Higher or the Standard Grade. For admission to the following courses a candidate must have obtained the standard indicated in each case:

- Mathematics or Mathematical Statistics: A pass of at least 40 per cent in Mathematics on the Higher or the Standard Grade.
- Mathematics for Economists: A pass in Mathematics on the Higher or the Standard Grade.

Potchefstroom: Prospective students are strongly advised to take Mathematics as a subject for the Std 10 examination. A pass in Mathematics on the Higher Grade is required for the degrees B.Com.(Training for Accountants) and B.Com.(Statistics).

Pretoria: A pass in Mathematics on the Higher Grade or at least 40 per cent on the Standard Grade.

Rand Afrikaans: A pass in Mathematics of at least 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade. For admission to Mathematics, a pass in Mathematics on the Higher Grade.

Rhodes: For admission to Statistics, a pass in Mathematics on the Higher or on the Standard Grade.

South Africa: For admission to Mathematics I or Mathematical Statistics I, a pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade.

Stellenbosch: A pass in Mathematics on the Standard Grade. For admission to Mathematics I, a pass in Mathematics on the Higher Grade or 60 per cent on the Standard Grade.

Western Cape: A pass in Mathematics is required for Economics.

Witwatersrand:

- A pass in English on the Higher Grade or at least 40 per cent on the Standard Grade and
- a pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade and
- a pass on the Higher Grade in one of the following subjects if Mathematics is passed on the Higher Grade, or two of the following subjects if Mathematics is passed on the Standard Grade at 60 per cent: Bantu Language*, Biology, French, Geography, German*, Hebrew, History, Latin, Physical Science.

* if not presented in fulfilment of Group A (Languages) requirement of the Joint Matriculation Board.

Zululand: Students are expected to have an adequate knowledge of matriculation Mathematics for the study of Statistics. A knowledge of Accounting is essential for Income Tax.

Duration: Three years of full-time study or at least four years of part-time study.

Diplomas

Diploma in Commerce: Dip.Comm. (UFH) or Dipl. Com. (UNorth)
University Diploma in Commerce (PU for CHE)

Higher Diploma in Business Data Processing: H.Dip.B.D.P. (UW)

Higher Diploma in Property Economics: H.Dip.Prop.Econ. (UW)

Diploma in Commercial Subjects (UZ)

Diploma in Commerce: Dip.Comm. (Fort Hare)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

Diploma in Commerce: Dipl. Com. (North)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

University Diploma in Commerce (Potchefstroom)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

Higher Diploma in Business Data Processing: H.Dip.B.D.P.,
(Witwatersrand)

Admission: A graduate who has attained a standard in Mathematics and Statistics equivalent to that of Mathematics and Statistics A in the curriculum for the B.Com. degree and for the C.T.A. (Certificate in the Theory of Accountancy) and who has an

adequate knowledge of COBOL (obtained by completing the elementary COBOL course given by the University of the Witwatersrand Computing Centre).

Duration: Two years of part-time study.

Higher Diploma in Property Economics: H.Dip.Prop.Econ.
(Witwatersrand)

Admission: A graduate in one of the following faculties: Architecture, Business Administration, Commerce, Engineering, Law; or a non-graduate who holds an approved professional qualification.

Duration: At least three years of part-time study.

Diploma in Commercial Subjects (Zululand)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

Certificate

Certificate in Secretarial Practice (Rhodes)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

Most of the universities offer a degree and/or a diploma course for teacher training in the field of Commerce. See FACULTY OF EDUCATION.

ACCOUNTANCY/ACCOUNTING SCIENCE

Universities: All the universities except the Universities of Fort Hare and the North.

Degrees

First degrees

Bachelor of Accountancy: B.Acc. (UDW, UN, UW) or
B.Accountancy (US)

Baccalaureus Rationalium: B.R. (PU for CHE)

Bachelor of Accounting Science: B.Compt. (Unisa)

Bachelor of Commerce & Certificate in the Theory of Accountancy:
B.Com., C.T.A. (UCT)

Bachelor of Economic and Administrative Sciences and the Certificate in the Theory of Accountancy: B.Com. - C.T.A. (RAU)

Honours degrees

Honours Bachelor of Accounting Science: Hons.B.Compt. (Unisa)

Honours Bachelor of Accountancy: Hons.B.Accountancy (US)

Master's degrees

Master of Accountancy: M.Acc. (UN) or M.Accountancy (US)

Master of Accounting Science: M.Compt. (Unisa)

Doctor's degrees

Doctor of Accounting Science: D.Compt. (Unisa)

Doctor of Accountancy: D.Accountancy (US)

To be able to qualify as a chartered accountant, a student must pass the final qualifying examinations set by the Public Accountants' and Auditors' Board, and serve the required period under Articles of Clerkship. The prescribed period of service is five years, but a two-year remission is given to graduates.

A candidate can take either one of the following degree courses or the Certificate in the Theory of Accountancy. The latter is gradually being replaced by degree courses.

Bachelor of Accountancy: B.Acc. (Durban-Westville, Natal, Witwatersrand)

Admission: As for the B.Com. degree.

Duration: Six years (Durban-Westville, Natal) or five years (Witwatersrand) of part-time study, or three years' full-time study followed by two years' part-time study (Durban-Westville).

Bachelor of Accountancy: B.Accountancy (Stellenbosch)

Admission: As for the B.Com. degree.

Duration: Three years of full-time study or four years of part-time study.

Honours Bachelor of Accountancy: Hons.B.Accountancy (Stellenbosch)

Admission: B.Accountancy degree.

Duration: Two years of part-time study.

This degree entitles the candidate to write the qualifying examination set by the Public Accountants' and Auditors' Board.

Baccalaureus Rationalium: B.R. (Potchefstroom)

Admission: An approved Bachelor's degree which includes the following courses: Accountancy III, Auditing II, Mercantile Law II, Cost Accounting II, Income Tax I.

Duration: One year of full-time study or two years of part-time study.

This degree admits the candidate to the qualifying examination set by the Public Accountants' and Auditors' Board.

Bachelor of Accounting Science: B.Compt. (South Africa)

Admission: As for the B.Com. degree.

Duration: 4 years.

Honours Bachelor of Accounting Science: Hons.B.Compt.
(South Africa)

Admission: B.Compt. degree or another degree with Accounting IV, Information Systems (or Computer Science I), Income Tax, Auditing II and Commercial Law III.

Duration: The examination shall comprise Accounting V and

Auditing III.

This degree admits candidates to the aforementioned Board's examinations.

Bachelor of Commerce and Certificate in the Theory of Accountancy: B.Com., C.T.A. (Cape Town)

Admission: As for the B.Com. degree.

Duration: Three years of full-time study for the B.Com. degree followed by two years of part-time study for the C.T.A.

Bachelor of Economic and Administrative Sciences and the Certificate in the Theory of Accountancy: B.Com. - C.T.A. (Rand Afrikaans)

Admission: As for the B.Com. degree.

Duration: Five years.

Certificate and Diplomas

Certificate in the Theory of Accountancy: C.T.A. (UCT, UOFS, UPE, UP, RU, UWC, UW)

Advanced Diploma in Management Accounting: Adv.Dip.Mgt.A. (UCT)

Diploma in Accountancy (UDW)

Diploma in Accountancy: Dip. Acc. (UN)

Diploma in Cost Accounting (PU for CHE)

Higher Diploma in Accountancy: H.Dip.Acc. (UW)

Diploma in Theory of Accountancy: D.T.A. (UZ)

Diploma in State Finance and Auditing (a) General or (b) Local Government (UZ)

Certificate in the Theory of Accountancy: C.T.A.

Cape Town and Rhodes:

Admission: As for the B.Com. degree.

Duration: Four years of full-time study (Rhodes) or five years of part-time study (Cape Town and Rhodes).

Orange Free State:

Admission: B.Com. (C.T.A. field of study)

Duration: Two years of full-time study.

Port Elizabeth:

Admission: B.Com. (Accountancy)

Duration: One year of full-time study or two years of part-time study.

Pretoria:

The C.T.A. will be issued to candidates who have passed a number of prescribed courses. Where applicable courses taken for the B.Com.(Hons.)(Accountancy) degree will be recognized for the C.T.A.

Western Cape:

Admission: B.Com.(Accountancy).

Duration: Two years.

Witwatersrand:

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Five years of part-time study.

Advanced Diploma in Management Accounting: Adv.Dip.Mgt.A. (Cape Town)

Admission: A candidate must have passed either the Qualifying Examination of the Public Accountants' and Auditors' Board of the Republic of South Africa; or examinations equivalent to the prescribed examinations.

Duration: One year of full-time study or at least two years of part-time study.

Diploma in Accountancy (Durban-Westville)

Admission: As for the B.Acc. degree.

Duration: As for the B.Acc. degree.

Curriculum: As for the B.Acc. degree.

Diploma in Accountancy: Dip. Acc. (Natal)

Admission: A graduate who qualifies for credit in ten or more courses of the B.Acc. degree.

Duration: Two years of part-time study.

Diploma in Cost Accounting (Potchefstroom)

Admission: B.Comm. degree with Accountancy III, Cost Accounting II, Income Tax I; or the National Diploma for Cost Accountants.

Duration: Two years.

Higher Diploma in Accountancy: H.Dip.Acc. (Witwatersrand)

Admission: A graduate who has been exempted from ten or more of the courses prescribed for the degree of B.Acc.

Duration: He must obtain credit in four prescribed courses.

Diploma in Theory of Accountancy: D.T.A. (Zululand)

The D.T.A. may be issued to a student who has completed the degree of Hons.B.Com. (Accounting and Auditing) and is registered as an articled clerk with the Public Accountants' and Auditors' Board or has completed his articled clerkship.

Diploma in State Finance and Auditing (a) General or (b) Local Government (Zululand)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study. This Diploma is offered in the University's Institute for Public Service Training.

ADMINISTRATION

Universities: Durban-Westville, Fort Hare, North, Orange Free State, Pretoria, South Africa, Stellenbosch, Western Cape, Zululand.

Degrees

First degrees

Baccalaureus Administrationis: B.Admin. (UDW, UOFS)

Bachelor of Administration: B.Admin. (UFH, UNorth, Unisa, US, UZ)

Bachelor of Public Administration: B.Admin. (UP)

Honours degrees

Honoris Baccalaureus Administrationis: B.Admin.Hons. (UDW)

Bachelor of Administration (Honours): B.Admin.(Hons.) (UFH)

Honours Bachelor of Administration: Hons.B.Admin. or B.Admin.Hons. (UNorth, Unisa, US, UZ)

Honneurs-Baccalaureus Administrationis: B.Admin.(Hons.) (UOFS)

Bachelor of Public Administration Honours: B.Admin.(Hons.) (UP)

Master's degrees

Magister Administrationis: M.Admin. (UDW, UOFS)

Master of Administration: M.Admin. (UFH, UNorth, Unisa, US, UZ)

Master of Public Administration: M.Admin. (UP)

Master of State and Municipal Administration (UP)

Master of Public Administration: M.P.A. (US)

The University of Cape Town offers the degree of Master of Public Administration: M.Pub.Ad. in the Faculty of Social Science.

Doctor's degrees

Doctor Administrationis: D.Admin. (UDW, UOFS)

Doctor of Administration: D.Admin. (UFH, UNorth, Unisa, US, UZ)

Doctor of Public Administration: D.Phil. (UP)

Baccalaureus Administrationis: B.Admin. or

Bachelor of Administration: B.Admin.

(Durban-Westville, Fort Hare, North, South Africa, Zululand)

Admission: As for the B.Com. degree.

Duration: Three years of full-time study or part-time study (South Africa).

Bachelor of Administration: B.Admin. (Orange Free State, Stellenbosch)

Admission: Matriculation Certificate or Standard 10 Certificate (Matriculation Exemption).

Duration: Three years of full-time study or four years of part-time study (Stellenbosch).

Bachelor of Public Administration: B.Admin. (Pretoria)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass on the Higher Grade in at least two of the following subjects: Economics, History, Geography, Mathematics, Biology, Physical Science, a third language.

A pass in Mathematics on the Higher Grade or 40 per cent on the Standard Grade is required for certain courses, e.g. Business Economics II, Economics II, Accountancy.

Duration: Three years of full-time study or four years of part-time study.

Diplomas

Diploma in Public Administration (UDW, UWC, UZ)

Diploma in State and Municipal Administration (UOFS)

Advanced Diploma in State and Municipal Administration (UOFS)

Diploma in Advanced Public Administration (UP)

Diploma in Local Government and Administration (UZ)

Diploma in Organisation and Method Study (UZ)

Diploma in Public Administration (Durban-Westville, Western Cape, Zululand)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

The University of Zululand also offers a three-year Diploma in Public Administration in its Institute for Public Service Training.

Diploma in State and Municipal Administration (Orange Free State)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

The curriculum is identical with the curriculum of the B.Admin. degree, except that the courses in Municipal Administration must be taken.

Advanced Diploma in State and Municipal Administration (Orange Free State)

Admission: Diploma in State and Municipal Administration.

Duration: 2 years.

The curriculum is identical with the B.Admin.(Hons.) degree plus an essay.

Diploma in Advanced Public Administration (Pretoria)

Admission: Standard 10 Certificate and appropriate experience.

Duration: At least two years and not more than four years.

Diploma in Local Government and Administration* (Zululand)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

Diploma in Organisation and Method Study* (Zululand)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

BUSINESS ADMINISTRATION (Post-graduate)

Universities: Cape Town, Durban-Westville, Potchefstroom, Pretoria, Stellenbosch, Witwatersrand.

Degrees

Honours degrees

Honours Bachelor of Business Administration: H.B.A. (PU for CHE)

Honours Bachelor of Business Management and Business Administration: Hons.B.(B. and A.) (US)

Master's degrees

Master of Business Administration: M.B.A. (UCT, UDW, PU for CHE, UP, UW)

Master of Business Management and Business Administration: M.B.A. (US)

Doctor's degrees

Doctor of Business Administration: D.B.A. (PU for CHE, UP)

Doctor of Business Management and Business Administration: D.B.A. (US)

Doctor of Philosophy: Ph.D. (UW)

Honours Bachelor of Business Administration: H.B.A. (Potchefstroom)

Admission: A Bachelor's degree.

Duration: Two years' extramural study.

* These diplomas are offered in the University's Institute for Public Service Training.

This degree admits a candidate to the M.B.A. degree course at Potchefstroom University for C.H.E.

Honours Bachelor of Business Management and Business Administration: Hons.B.(B. and A.) (Stellenbosch)

Admission: A Bachelor's degree.

Duration: One year of full-time study or two years of part-time study.

This degree admits a candidate to the M.B.A. degree course at the University of Stellenbosch.

Master of Business Administration: M.B.A. (Cape Town, Durban-Westville, Pretoria, Witwatersrand)

Admission:

Cape Town: A Bachelor's degree in Arts, Commerce, Engineering, Law, Science or Social Science; and Chartered Accountants.

Durban-Westville: A Bachelor's degree, or the candidate must be registered as an Accountant and Auditor, and have passed Mathematics in Std 10 or Mathematics I at university, and a level of maturity sufficient to benefit from this course.

Pretoria: A Bachelor's degree, a pass mark in Mathematics on the Std 10 level and two years of practical experience.

Witwatersrand: A graduate in any faculty, or a non-graduate who holds a professional qualification, or, in exceptional cases, a person whose admission is warranted by virtue of his experience, qualifications and abilities.

Duration:

Cape Town: One year of full-time study.

Durban-Westville: Three years of part-time study.

Pretoria: Two years' extramural study; may be taken over three years.

Witwatersrand: 64 weeks of full-time study divided into 6 academic terms.

Diplomas

Advanced Diploma in Business Administration: Adv. Dip. B.A.
(UCT)

Diploma in Business Management and Administration (UDW)

Diploma in Business Administration: Dip.B.A. (UP)

Diploma in Business Management and Business Administration:
Dip. (B. and A.) (US)

Advanced Diploma in Business Management and Business Administration:
Adv. Dip. (B. and A.) (US)

Advanced Diploma in Business Administration: Adv.Dip.B.A.
(Cape Town)

Admission: Approved non-graduates with acceptable professional qualifications and/or several years of business experience.

Duration: See M.B.A. degree.

The M.B.A. degree and Diploma course are identical in content and standard.

Diploma in Business Management and Administration (Durban-
Westville)

Admission: A Standard 10 Certificate with a pass in Mathematics; a level of maturity sufficient to benefit from this training programme; and the candidate must be at least 25 years old.

The M.B.A. degree course and Diploma course are identical.

Diploma in Business Administration: Dip.B.A. (Pretoria)

Admission: Qualifications and/or experience equivalent to the requirements for a Bachelor's degree.

The regulations for the M.B.A. degree are also applicable to the Diploma.

Diploma in Business Management and Business Administration:
Dip. (B. and A.) (Stellenbosch)

Admission: A Standard 10 Certificate.

Students must have reached an adequate level of maturity. The Hons.B.(B. and A.) degree course and Diploma course are identical.

Advanced Diploma in Business Management and Business Administration: Adv.Dipl.(B. and A.) (Stellenbosch)

Admission: Diploma (B. and A.) and practical experience.

The M.B.A. degree course and the Adv.Dipl.(B. and A.) course are identical.

BUSINESS LEADERSHIP (Post-graduate)

University: South Africa.

Degrees

Master of Business Leadership: M.B.L. (General Management)

Master of Business Leadership: M.B.L. (Management Control Systems)

Master of Business Leadership: M.B.L. (Manpower Management)

Doctor of Business Leadership: D.B.L.

Master of Business Leadership: M.B.L. (General Management)

Admission:

- (i) A Bachelor's degree; or
- (ii) the Certificate in the Theory of Accountancy and the C.A.(S.A.); and
- (iii) at least three years' appropriate experience in an approved undertaking; provided that with the special permission of the Senate a shorter period may be accepted;
- (iv) the student must join a study group. Should it be impossible to form a local group, a student must join an existing group elsewhere. A student's enrolment is accepted on these conditions.

Duration: About four years.

Master of Business Leadership: M.B.L. (Management Control Systems)

Admission: (i) A Bachelor's degree with Accounting III; or (ii), (iii) and (iv): See M.B.L.(General Management).

Duration: About four years.

Master of Business Leadership: M.B.L. (Manpower Management)

Admission: (i) A Bachelor's degree with Industrial Psychology or Psychology as a major subject; provided that a student with psychology as a major subject must first pass a departmental oral examination;

(ii) at least three years' appropriate experience in an approved undertaking; provided that with special permission a shorter period may be accepted;

(iii) and (iv) : See M.B.L.(General Management).

Duration: Approximately four years.

BUSINESS SCIENCE

Universities: Cape Town, Durban-Westville.

Degrees

First degrees

Bachelor of Business Science: B.Bus.Sc. (UCT, UDW)

Bachelor of Business Science & Law: B.Bus.Sc., LL.B. (UCT)

Bachelor of Business Science & Certificate in the Theory of Accountancy: B.Bus.Sc., C.T.A. (UCT)

Master's degree

Master of Business Science: M.Bus.Sc. (UCT)

Bachelor of Business Science: B.Bus.Sc. (Cape Town)

Admission: As for the B.Com. degree.

Duration: Four years of full-time study.

Each student must choose one special field from the following: Actuarial Science, Banking, Business Finance, Computing and Data Processing, Economics (General), Insurance, Marketing, Mathematical Economics, Personnel, Psychology, Public Administration, Statistics and Operational Research, Sociology.

Bachelor of Business Science: B.Bus.Sc. (Durban-Westville)

Admission: Matriculation Certificate or Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Higher Grade or a pass in Mathematics I at a university.

Duration: Four years.

Principal subjects include Accounting, Business Economics, Economics, Industrial Psychology, Statistics. Students select at least two.

A student who has completed this degree may register for either the M.Com. or M.B.A. degree.

ECONOMICS

Universities: Rhodes, Stellenbosch, Witwatersrand.

Degrees

First degrees

Bachelor of Economics: B.Econ. (RU, US)

Bachelor of Economic Science: B.Econ.Sc. (UW)

Honours degrees

Bachelor of Economics with Honours: B.Econ.(Hons.) (RU)

Honours Bachelor of Economics: Hons.B.Econ. (US)

Bachelor of Economic Science with Honours: B.Econ.Sc.Hons. (UW)

Master's degrees

Master of Economics: M.Econ. (RU, US)

Master of Economic Science: M.Econ.Sc. (UW)

Doctor's degrees

Doctor of Economics: D.Econ. (RU, US)

Doctor of Economic Science: D.Econ.Sc. (UW)

Doctor of Philosophy: Ph.D. (RU)

Bachelor of Economics: B.Econ. or

Bachelor of Economic Science: B.Econ.Sc. (Rhodes, Witwatersrand)

Admission: As for the B.Com. degree.

Duration: Three years of full-time study.

Bachelor of Economics: B.Econ. (Stellenbosch)

Admission: Matriculation Certificate or Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Standard Grade should Statistics (half course) and Mathematics (half course) be included in the curriculum for the degree.

Duration: Three years of full-time study or four years' extramural study.

MARKETING

University: South Africa.

Diploma

Diploma in Market Research and Advertising

Admission: A degree.

Duration: Two years.

PERSONNEL LEADERSHIP/MANAGEMENT

Universities: Orange Free State, Witwatersrand.

Degrees

Bachelor of Personnel Leadership: B.P.L. (UOFS)

Honours Bachelor of Personnel Leadership: B.P.L.(Hons.)

Master of Personnel Leadership: M.P.L.

Doctor of Personnel Leadership: D.P.L.

Bachelor of Personnel Leadership: B.P.L. (Orange Free State)

Admission: As for the B.Admin.degree.

Duration: Three years of full-time study.

The University of Fort Hare offers the degree Bachelor of Arts in Personnel Management in the Faculty of Arts.

Diplomas

Higher Diploma in Personnel Management: H.Dip.Pers.Man.
(Witwatersrand)

Admission: A graduate; or a non-graduate who holds a professional qualification; or a person whose admission is warranted by virtue of his experience, qualifications and abilities.

Duration: One year of full-time study.

TAXATION

University: Cape Town.

Diploma

Advanced Diploma in Taxation

Admission: A person must have passed either the Qualifying Examination of the Public Accountants' and Auditors' Board of the Republic of South Africa; or the attorney's entrance examination; or examinations equivalent to the aforementioned examinations.

Duration: One year of full-time study or at least two years of part-time study.

FACULTY OF DENTISTRY

DENTISTRY

ORAL HYGIENE

DENTISTRY

Universities: Pretoria, Stellenbosch, Western Cape, Witwatersrand.

Degrees

First degrees

Bachelor of Dental Science: B.Ch.D. (UP, US) or B.D.S. (UW)

Baccalaureus Chirurgiae Dentium: B.Ch.D. (UWC)

Bachelor of Science in Oral Biology: B.Sc.(Oral Biology) (UW)

Honours degree

Bachelor of Dental Sciences Honours: B.Ch.D.(Hons.) (UP)

Master's degrees

Master of Dental Science: M.Ch.D. (UP, US) or M.D.S. (UW)

Master of Dental Sciences: M.Dent. (UP)

Master of Science in Dental Sciences: M.Sc. in Dental Sciences (US)

Master of Dentistry: M.Dent. (UW)

Doctor's degrees

Doctor of Dental Science: D.Ch.D. (UP, US)

Doctor of Philosophy (Odontology): Ph.D.(Odont.) (US)

Doctor of Philosophy in Dentistry: Ph.D.(Dent.) (UW)

Doctor of Science in Dentistry: D.Sc.(Dent.) (UW)

Bachelor of Dental Science: B.Ch.D. or B.D.S. or

Baccalaureus Chirurgiae Dentium: B.Ch.D.

(All the above-mentioned universities)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements

Pretoria: See p. 202.

Stellenbosch: A pass in Mathematics on the Higher or the Standard Grade. Prospective students are strongly advised to take Physical Science and/or Biology and/or Physiology for the Std 10 examination.

Western Cape: See p. 203.

Witwatersrand: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade and a pass in one of the following subjects if Mathematics has been passed on the Higher Grade; or two of the following subjects if Mathematics has been passed on the Standard Grade: Bantu Language, Biology, French, Geography, German, Hebrew, History, Latin, Physical Science, Physiology.

Duration: 5½ years of full-time study.

Bachelor of Science in Oral Biology: B.Sc.(Oral Biology)
(Witwatersrand)

Admission: As for the B.D.S. degree.

Duration: Four years of full-time study.

This degree is designed for students who wish to follow a career in biological research and teaching, particularly in the field of dental science.

Diplomas (Post-graduate)

Diploma in Dental Public Health (UP)

Diploma in Maxillo-facial and Oral Surgery: Dip.M.Fos. (UW)

Diploma in Oral Pathology: Dip.Oral Path. (UW)

Diploma in Orthodontics: Dip.Orth. (UW)

Diploma in Periodontics and Oral Medicine: Dip.P.O.M. (UW)

Diploma in Prosthodontics: Dip.Pros. (UW)

Higher Diploma in Dentistry: H.Dip.Dent. (UW)

ORAL HYGIENE

Universities: Pretoria, Stellenbosch, Witwatersrand.

Diploma

Diploma in Oral Hygiene: Dip.O.H.
(All the above-mentioned universities)

Diploma in Oral Hygiene (Pretoria)

Admission: Standard 10 Certificate with Biology and/or Physical Science. Preference is given to candidates who hold a Standard 10 Certificate (Matriculation Exemption).

Duration: Two years of full-time study.

Diploma in Oral Hygiene (Stellenbosch)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Standard Grade. Prospective students are strongly recommended to take Physical Science and/or Biology on the Standard Grade. Only a limited number of students are admitted.

Duration: Two years of full-time study.

Diploma in Oral Hygiene: Dip.O.H. (Witwatersrand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: One and a half years of full-time study.

FACULTY OF EDUCATION

EDUCATION

PHYSICAL EDUCATION

EDUCATION

Universities: All the universities in the Republic of South Africa train teachers. See under the universities concerned for the degrees, diplomas and certificates offered by each university.

POST-GRADUATE DEGREES

Bachelor of Education or Baccalaureus Educationis: B.Ed.

(All the universities)

Admission: A Bachelor's degree, a teacher's diploma and at least two years' teaching experience. Some universities require more teaching experience, others none at all.

Duration: One year of full-time study or two years of part-time study.

Master's degree

Master of Education or Magister Educationis: M.Ed. (All the universities)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW)

Doctor of Literature: D.Litt. (UN, RU)

Doctor of Education or Doctor Educationis: D.Ed. (UDW, UFH, UNorth, UQFS, UPE, PU for CHE, UP, RAU, Unisa, US, UWC, UZ)

UNIVERSITIES

UNIVERSITY OF CAPE TOWN

Secondary teachers' courses

Secondary Teacher's Diploma: One year after an approved Bachelor's

degree which includes a suitable combination of school teaching subjects.

Secondary Teacher's Diploma (Technical): One year of full-time study after one of the following:

- A degree in Engineering, Pure Science or Applied Science
- Higher National Diploma for Technicians (four-year course)
- National Diploma for Technicians (three-year course)
- a recognized equivalent of any one of the above.

Higher Teacher's Diploma in Commerce:

Four years of full-time study after a Standard 10 Certificate or an equivalent certificate. The course, which is given in collaboration with the Cape College for Advanced Technical Education, provides training for secondary school teachers of commercial subjects.

Higher Teacher's Diploma in Home Economics: Four years of full-time study after a Standard 10 Certificate or an equivalent certificate. The course, which is given in collaboration with the Cape College for Advanced Technical Education, provides training for secondary school teachers of subjects in the field of Home Economics.

Primary teachers' courses

Bachelor's degree in Primary Education: Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Post-graduate Primary Teacher's Diploma: One academic year after an approved degree including prescribed school subjects.

Primary and/or secondary teachers' courses

Bachelor of Arts in Art - B.A.(Art): Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with an aggregate of at least 50 per cent. In their fourth year students are admitted to the course for the Secondary Teacher's Diploma or that for the Post-graduate Primary Teacher's Diploma.

B.Mus. (Music Education): Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with an aggregate of at least 50 per cent. In their fourth year students are admitted to the course for the Secondary Teachers' Diploma. On completion both the degree and diploma are awarded. (See MUSIC p. 106 for additional admission requirements concerning musical qualifications.)

Teacher's Licentiate Diploma (School Music): Four years after a Standard 10 Certificate. Additional admission requirements as for B.Mus.(Music Education).

Teacher's Diploma in Music (Instrumental or Vocal): Three years after a Standard 10 Certificate.

Special Endorsement in Music for holders of the Primary Teacher's Certificate: One year after a Standard 10 Certificate and a Primary Teacher's Certificate.

Specialist Teacher's Diploma in Speech and Drama: One year after

- a B.A. degree including at least two courses in Drama; or
- a B.A. degree including three courses in English and a qualification in Speech and Drama, or practical experience and studies to the satisfaction of the Head of the Department.

Special Endorsement in Speech and Drama for holders of the Primary Teacher's Certificate: Special one-year course after a Standard 10 Certificate and the Primary Teacher's Certificate.

Other teachers' courses

Diploma for Teachers of Children Handicapped in Speech and Hearing: One academic year after an approved three-year teacher's certificate.

Diploma for Teachers of the Deaf and the Partially Hearing: One academic year after a Standard 10 Certificate and an approved three-year teacher's certificate.

Diploma for Teachers of Special Classes: One academic year after an approved three-year teacher's certificate.

Diploma in Clinical Remedial Teaching: One academic year after an approved three-year teacher's certificate and at least two years' teaching experience in schools.

Certificate in Teaching Physiotherapy: See PHYSIOTHERAPY p. 198.

UNIVERSITY OF DURBAN-WESTVILLE

Secondary teachers' courses,

Baccalaureus Paedagogiae in Arts - B.Paed.(Arts).

Baccalaureus Paedagogiae in Science - B.Paed.(Science).

Baccalaureus Paedagogiae in Commerce - B.Paed.(Commerce).

Baccalaureus Paedagogiae in Home Economics - B.Paed.(Home Ec.).

Each of the curricula of the above-mentioned four degrees is a four-year integrated academic and professional degree curriculum which fulfils all the requirements for the degree concerned as well as the requirements for the training of teachers for secondary schools.

The admission requirements are the same as for the field of study concerned. For Arts see p. 90, Science p. 201, Commerce p. 119 and Home Economics p. 211.

University Higher Diploma in Education: One year of full-time study after an approved degree which includes the prescribed courses in the required school subjects.

University Diploma in Education (Junior Secondary): Three years of full-time study after a Matriculation Exemption Certificate or a Standard 10 Certificate with at least two subjects passed on the Higher Grade, one being an official language, or any other qualification deemed equivalent by the Senate.

Primary teachers' courses

Baccalaureus Paedagogiae in Primary Education - B.Paed.(Prim. Ed.): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

University Diploma in Education (Senior Primary): Three years of full-time study after a Matriculation Exemption Certificate or a Standard 10 Certificate with at least two subjects passed on the Higher Grade, one being an official language, or any other qualification deemed equivalent by the Senate.

Other teachers' courses

Diploma for Teachers of the Deaf and Hard of Hearing: One year of full-time study or two years of part-time study after an approved three-year teacher's diploma obtained after full-time study at a recognized institution and at least two years' teaching experience at an ordinary school or one year's experience at a school for special education.

Diploma in Remedial Education: As for the above-mentioned Diploma.

Diploma in Special Education: One year of full-time study or two years of part-time study after an approved three-year education diploma, or a degree and an education diploma, or a combined education degree and at least two years' teaching experience in an ordinary school or one year's experience at a school for special education.

Diploma in School Counselling: One year of full-time study or two years of part-time study. A candidate must hold the B.Paed. degree or a Bachelor's degree with Education III or Psychology III and an approved teachers' diploma. In addition candidates must have had at least four years' teaching experience.

Diploma in Resource Centre Management: Two years of part-time study after an approved three-year teaching qualification and three years' approved classroom experience. Students will be attached to a Resource Centre in a school throughout the two years of the course.

Diploma in the Teaching of Physiotherapy: Two years after the National Diploma in Physiotherapy. The second year shall consist of practical work done at the School of Physiotherapy.

UNIVERSITY OF FORT HARE

Secondary teachers' courses

Bachelor of Pedagogics - B.Ped.: Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). This is an integrated professional degree which may be obtained in any of the following options:

- Arts (major subjects - Afrikaans, Bantu Language, Biblical Studies, English, Geography, German, History, Latin, Library Science or Psychology)

- Science (major subjects - Chemistry or Physics, Botany or Zoology, Mathematics, Geography)
- Economic Sciences
- Music
- Agriculture.

Higher Secondary Teachers' Diploma - H.S.T.D.: Three years after a Standard 10 Certificate. The Diploma may be obtained in any of the following options: Arts, Science, Economic Sciences, Agriculture, Fine Arts, Physical Education.

University Education Diploma - U.E.D.: One year after an approved university degree which includes the prescribed courses in school subjects.

UNIVERSITY OF NATAL

Secondary teachers' courses

University Education Diploma (Graduate) or the Higher Education Diploma (Post-Graduate): One year after an approved degree containing the requisite number of school subjects.

University Education Diploma (Non-Graduate): One year after a student has completed courses of study towards an approved degree, in such a manner that all the requirements of the degree may be fulfilled by one further year of study.

The University Education Diploma (Non-Graduate) may be converted into the Higher Education Diploma (Post-Graduate) or the University Education Diploma (Graduate) on completion by the candidate of the remaining admission requirements for such Diploma.

- (i) Higher Education Diploma: Four years of full-time study after a Standard 10 Certificate and a pass in both official languages with at least one on the Higher Grade. The curriculum must be completed in one of the following fields of study: Art, Commerce, Industrial Arts, Home Economics.

This Diploma is offered by the University in conjunction with the Natal College for Advanced Technical Education.

- (ii) Higher Education Diploma: Four years of full-time study after a Standard 10 Certificate with a pass in the first language on the Higher Grade and a pass in the second language either on the Higher Grade with an F symbol or on the Standard Grade with an E symbol; and another subject

passed on the Higher Grade. The curriculum must be completed in one of the following fields of study: Arts, Science.

This Diploma is offered in conjunction with certain Colleges of Education.

- (iii) Higher Education Diploma (Technical): Two years of part-time study after
- a Std 10 Certificate including both official languages with at least one passed on the Higher Grade, or at least four subjects at NTC III level plus the two official languages, and
 - a National Diploma in a specialist direction or equivalent.
- (iv) Higher Education Diploma (Post-School): Two years of part-time study after
- a Std 10 Certificate including both official languages with at least one passed on the Higher Grade, or other equivalent qualifications, and
 - an approved three-year education diploma that includes at least two school subjects of at least second-year degree level, or a National Diploma in a specialist direction or equivalent.

Diplomas (iii) and (iv) are offered in conjunction with the Natal College for Advanced Technical Education.

Teacher's course in Remedial Education

Certificate in Remedial Education: One year of full-time study or two years of part-time study after

- a degree plus a recognized teaching qualification; or
- a recognized Teacher's Diploma requiring three years of training and in addition two years of approved teaching experience.

UNIVERSITY OF THE NORTH

Secondary teachers' courses

Higher Secondary Teachers' Diploma - H.S.T.D.: Three years after a Matriculation Certificate or the Matriculation Exemption Certificate.

University Education Diploma - U.E.D.: One year after an approved Bachelor's degree.

University Education Diploma (Non-Graduate) - U.E.D.(non-graduate): One year. A candidate may fall short of only one course towards obtaining his degree and must hold the Matriculation Certificate or the Matriculation Exemption Certificate.

Any holder of the U.E.D.(non-graduate) may convert it to a full U.E.D. by completing the outstanding academic requirements for the degree.

Bachelor of Arts in Pedagogy - B.A.Ped. or Bachelor of Commerce in Pedagogy - B.Com.Ped.: Four years after a Matriculation Certificate or a Matriculation Exemption Certificate.

Bachelor of Science in Pedagogy - B.Sc.Ped.: Four years after a Matriculation Certificate or a Matriculation Exemption Certificate. Students shall be admitted only if they have a rating of 20 or more on the University of the North Scale. (See Faculty of Science, p.201.)

UNIVERSITY OF THE ORANGE FREE STATE

Secondary teachers' courses

Higher Education Diploma (Post-graduate) - H.E.D.Post-graduate: One year of full-time study or 18 months (3 semesters) of part-time study after a recognized degree which must also include approved subjects.

Higher Education Diploma (Non-graduate) - H.E.D.(Non-graduate): Four years of full-time study after a Standard 10 Certificate or equivalent, with or without Matriculation Exemption, and passes in both official languages. This Diploma is offered in the following fields: General; Science; Physical Education; Industrial Arts and/or Technical Drawing; Home Economics; Art Education; Commercial subjects; Dramatic Art and Theatrical Art; School Librarianship. For some of these fields there are additional admission requirements, mainly concerning school subjects passed.

Bachelor of Agriculture - B.Agric.: Three years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

This degree grants admission to the H.E.D. post-graduate course for the professional training of prospective teachers.

Bachelor of Science in Home Economics Education - B.Sc. Home Economics Ed.: Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Higher Grade or at least 40 per cent on the Standard Grade and a pass in Physical Science and/or Biology on the Standard Grade.

Primary and/or secondary teachers' courses

UOFS Teacher's Diploma in Music: Four years after a Standard 10 Certificate. See B.Mus.(p. 106) for additional requirements.

UOFS Teacher's Licentiate in Music: Three years after a Standard 10 Certificate.

Diploma in Nursing Education

Post-basic Diplomas in Nursing which includes inter alia, Post-basic Diploma in Nursing Education.

See NURSING p. 193.

TEACHERS' COLLEGE OF THE UOFS

Education Diploma: Three years after a Standard 10 Certificate with passes in both official languages.

The College offers optional fourth year specialization courses in subject teaching, special education or pre-primary teaching.

UNIVERSITY OF PORT ELIZABETH

Primary and/or secondary teachers' courses

Baccalaureus Artium (Educationis) - B.A.(Ed.): A four-year integrated academic and professional degree course which fulfils all the requirements for the B.A. degree as well as the requirements for the training of teachers. There are three curricula, namely Junior Primary Teaching, Senior Primary Teaching and Secondary Teaching.

Secondary teachers' courses

Baccalaureus Scientiae (Educationis) - B.Sc.(Ed.) and

Baccalaureus Commercii (Educationis) - B.Com.(Ed.)

Each of the curricula of the above-mentioned degrees is a four-year integrated academic and professional degree course which fulfils all the requirements for the degree concerned as well as the requirements for the training of teachers for secondary schools.

The admission qualifications for all three of the above-mentioned degrees are the same as for the degree concerned. See B.A. p.90, B.Sc. p.202 and B.Com. p.120.

Higher Education Diploma (Post-graduate) - H.E.D.(Post-graduate):

One year after an approved Bachelor's degree of a recognized university which includes the minimum number of approved school subjects.

Higher Education Diploma - H.E.D.: Four years after a Matriculation Certificate or a Standard 10 Certificate. This Diploma may be obtained with the following endorsements: Human Sciences; Natural Sciences (in the field of Physical and Mathematical Sciences); Biological Sciences; Economic Sciences; Physical Education; Woodwork and Metalwork; School Music; Typing, Snelskrif and Shorthand.

National Education Diploma (Technical) - N.E.D.(Technical):

One year of full-time study after one of the following:

- An approved degree
- a Standard 10 Certificate or equivalent qualification* and a qualification equivalent to Std 10 + 3 which includes two school subjects on a second-year degree level. (Technical subjects relating to the candidate's specialist post may be included.)

Provisional admission may be granted by the Senate to an immigrant who has been resident in the Republic for less than four years and who cannot meet the language requirements.

Primary teachers' courses

Education Diploma - E.D.: Three years after a Matriculation

* A four-subject NTC III plus two official languages of which one must be passed on the Higher Grade and English Language (excluding English Literature) must be one; Abitur, etc. shall be regarded as equivalent.

Certificate or a Standard 10 Certificate. This Diploma may be obtained in either the Senior Primary or the Junior Primary field.

Diploma in Musical Education: Three years of full-time study after Standard 10. See B.Mus.(p.106) for additional requirements.

Other teachers' courses

Diploma in Specialized Education - D.S.E. (Special classes for the mentally handicapped): Two years of part-time study after one of the following:

- A degree and a post-graduate secondary teacher's diploma
- a degree and a lower secondary teacher's diploma
- a lower secondary teacher's diploma
- a three-year primary teacher's certificate
- any three-year teaching qualification which the Senate recognizes for the purpose.

Baccalaureus Curationis (Institutionis et Administrationis) - B.Cur.(I. et A.): See NURSING p. 192.

Diploma in Nursing Education: See p. 193.

POTCHEFSTROOM UNIVERSITY FOR CHRISTIAN HIGHER EDUCATION

Secondary teachers' courses

Bachelor of Science (Domestic Science)(Education) - B.Sc. (Dom.Sc.Ed.): Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Higher Grade, or alternatively, a pass in Mathematics and in a science subject, preferably Physical Science, on the Standard Grade.

Higher Education Diploma (post-graduate) - H.E.D.(post-graduate): One year after an approved degree of a recognized university which includes the minimum number of prescribed school subjects.

Higher Education Diploma (post-graduate)(Guidance) - H.E.D. (post-graduate)(Guidance): One year after a B.A., B.Sc. or B.Comm.(Industrial Psychology) degree with a major in Psychology and which also includes two school subjects of which one must be at least on second-year level and the other at least on first-

year level. One course in Sociology or Social Work is recommended for the B.A. degree.

Higher Education Diploma (post-graduate)(School Librarianship): One year after an approved Bachelor's degree with Library Science I and II in the curriculum.

Higher Education Diploma for Secondary Schools: Four years after a Matriculation Certificate or a Standard 10 Certificate. The course will, with regard to the academic part, be adapted to the needs of the various specialized fields, for example Domestic Science and Music. Uniform curricula, but with optional subjects, are recommended for the following specialized fields: Human Sciences, Pure Sciences, Economic Sciences, Music, Domestic Science, Industrial Arts, School Librarianship, Art.

Potchefstroom University Teacher's Licentiate in Music: Three years after a Matriculation Certificate or a Standard 10 Certificate.

A student must satisfy the Head of the Department of Music in a practical and theoretical test that his standard is high enough to attend the course with profit. He must have passed Music as a subject for the Std 10 examination or have obtained the advanced standard of the University of South Africa in the chosen practical subject.

Primary teachers' courses

Education Diploma for Primary Schools: Four years after a Matriculation Certificate or a Standard 10 Certificate. During the first three years all the students take a general primary school course and in the fourth year, should it be offered, they have a choice between a senior primary course in general school subjects or in remedial teaching for the primary school.

Higher Education Diploma (Primary Education): One year after an approved degree which includes the required school subjects, or an approved three-year teachers' diploma.

Teacher's Diploma in Nursing

Diploma in Nursing Education (graduate): One year after a degree in Nursing which includes a course in Anatomy.

UNIVERSITY OF PRETORIA

Secondary teachers' courses

Bachelor of Arts (Education) - B.A.(Ed.)

Bachelor of Commerce (Education) - B.Com.(Ed.)

Bachelor of Science (Education) - B.Sc.(Ed.)

Each of the curricula of the above-mentioned degrees is a four-year integrated academic and professional degree course which fulfils all the requirements for the degree concerned as well as the requirements for the training of teachers for the secondary school.

The admission requirements for all three of the above-mentioned degrees are the same as for the degree concerned. See B.A. p.91, B.Com. p.120 and B.Sc. p. 202.

Bachelor of Agriculture (Education) - B.Agric.(Ed.): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics and Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade.

Bachelor of Arts (Education)(Art) - B.A.(Ed.)(Art): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). See B.A. p. 91 for additional requirements.

Art as a Std 10 subject is not a requirement. Candidates must, however, take a practical test to determine whether they have the necessary ability to attend the courses with profit.

Bachelor of Arts (Education)(Music) - B.A.(Ed.)(Music): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). A candidate must satisfy the lecturers concerned in a practical test that his proficiency in the performing art as well as his musicality and general knowledge of music justifies admission.

Bachelor of Science in Domestic Science (Education) - B.Sc. (Dom.Sc.)(Ed.): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). See B.Sc. p.202 for additional requirements.

Higher Education Diploma (Post-graduate): One year of full-time study after a Bachelor's degree which either includes the minimum

number of courses in approved school subjects or is recognized for teaching purposes irrespective of the subject combination.

Higher Education Diploma (Post-graduate)(Extramural): An extramural course extending over three semesters. Only candidates who are employed in a permanent capacity and who have fulfilled the admission requirements for the aforementioned one-year full-time post-graduate course will be admitted to the extramural course.

Higher Education Diploma: Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate with Afrikaans and English as subjects passed. This Diploma is offered with the following endorsements: General; Commerce; Commerce Secretarial; Home Economics; Woodwork and Metalwork; Music; Physical Education; Technical Education.

With the exception of two cases, there are additional admission requirements for each endorsement (specialized field) mainly concerning subjects passed in the Std 10 examinations.

Secondary and/or primary teacher's course

Diploma in Music (Individual Teaching): Three years of full-time study after a Standard 10 Certificate. See B.A.(Ed.) (Music) p. 154 for additional requirements.

Primary teachers' courses

Bachelor of Arts (Education)(Senior Primary) - B.A.(Ed.) (Senior Primary)

and

Bachelor of Arts (Education)(Junior Primary) - B.A.(Ed.) (Junior Primary)

Each of the curricula of the above-mentioned two degrees is a four-year full-time integrated academic and professional degree course which fulfils all the requirements for the B.A. degree as well as the requirements for the training of teachers for primary schools. The admission requirements are the same as for the ordinary B.A. degree. See p. 91.

Pre-Primary teacher's course

Bachelor of Arts (Education)(Pre-Primary) - B.A.(Ed.)(Pre-Primary) - B.A.(Ed.){Pre-Primary}: The curriculum is a four-

year integrated academic and professional degree course which fulfils all the requirements for the B.A. degree as well as the requirements for the training of pre-primary teachers. The admission requirements are the same as for the ordinary B.A. degree. See p. 91.

Other teachers' courses

Diploma in Specialized Education (Special Education - Handicapped children): One year of full-time study after a recognized three-year teacher's certificate obtained after a Std 10 Certificate.

Higher Education Diploma (Post-graduate)(Special Education - Handicapped children): One year of full-time study after a Bachelor's degree and a one-year post-graduate teacher's diploma.

Diploma in Orthopedagogics: One extended academic year after:

- A Bachelor's degree with Psychology III or Sociology III and/or Social Work III; or
- the B.A.(Log.) degree of the University of Pretoria; or
- other qualifications which the Faculty Council may regard as adequate for admission.

This Diploma is not recognized for education purposes.

Teacher's Diploma in Occupational Therapy: See p. 196.

Teacher's Diploma in Physiotherapy: See p. 198.

Diploma in Nursing Education: See p. 193.

Bachelor of Nursing (Instruction and Administration) - B.Cur. (I. et A.): See p. 192.

RAND AFRIKAANS UNIVERSITY

Secondary teachers' courses

B.A.(Education) - B.A.(Ed.)

B.Bibl. (Education)

B.Com. (Education)

B.Sc. (Education)

Each of the curricula of the above-mentioned four degrees is a four-year integrated academic and professional degree curriculum

which fulfils all the requirements for the degree concerned as well as the requirements laid down by the Committee of Educational Heads for the training of teachers for secondary schools.

The admission requirements are the same as for the ordinary degree concerned. For B.A. see p. 91, B.Bibl. p.102, B.Com. p.120 and B.Sc. p.202.

Post-graduate Higher Education Diploma - H.E.D.(Post-graduate): One summer term (approximately 1½ months) and two semesters of full-time study after an approved Bachelor's degree which includes the minimum number of subjects for teaching purposes as stipulated by the Committee of Educational Heads.

Four-year Higher Education Diploma - H.E.D.: Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate with Afrikaans and English as subjects passed. This Diploma may be obtained in the following fields: Languages and Human Sciences; Commercial field (academic subjects); Commercial field (subjects requiring proficiency); Physical Education; Librarianship.

For each of these fields there are additional admission requirements, mainly concerning pass marks in particular subjects in the Matriculation and Standard 10 examinations.

One-year Post-graduate Higher Education Diploma (Technical): As for the H.E.D.(Post-graduate) provided that one of the subject didactics must be in a technical field.

One-year Higher Education Diploma (Technical): One year after a Standard 10 Certificate or equivalent qualification and a three-year diploma which includes at least two school subjects (technical subjects) on second-year level, e.g. motor mechanics, electricity, radio mechanics, woodworking, plumbing, and welding and metalwork.

Courses in Nursing Education

Bachelor of Nursing Instruction and Administration - B.Cur. (Ed. et Adm.)

and

Diploma in Nursing Education

See NURSING p.192 and p.193 respectively.

RHODES UNIVERSITY

Secondary teachers' courses

Higher Education Diploma (Graduate): One year after an approved degree with certain specified courses included in the curriculum for that degree.

Higher Education Diploma (Non-Graduate): Four years after a Matriculation Certificate or a Standard 10 Certificate. The curriculum for the Diploma shall be arranged in accordance with certain provisions with regard to the courses to be followed.

Rhodes University Licentiate Diploma in Music - R.U.L.M.: Three years after a Standard 10 Certificate, or the Board of the Faculty must be satisfied as to the candidate's suitability to take the course. The latter is considered only on the grounds of mature age and/or exceptional ability.

The Diploma may be awarded as a diploma for performers, or for teachers, or for choirmasters, or for church organists.

Primary teachers' courses

Higher Education Diploma (Graduate, for senior-primary school teachers): One year after a Bachelor's or higher degree which includes certain prescribed school subjects.

Lower and Higher Primary Teacher's Certificate - L.P.T.C./H.P.T.C.: Three years after a Standard 10 Certificate.

UNIVERSITY OF SOUTH AFRICA

Secondary teacher's courses

Higher Education Diploma (Post-graduate) - H.E.D.(Post-graduate): One or two years after an approved degree which includes the required number of courses in the approved school subjects and a teacher's diploma recognized by the Senate; or

at least two years after the above-mentioned degree without a diploma: provided that the completion of the H.E.D.(Post-graduate) shall be subject to at least twenty weeks' satisfactory experience as a teacher or as a lecturer at a teacher's training college in a South African Education Department or in a teacher's training section of a university.

Higher Education Diploma (Technical) - H.E.D.(Technical): A student shall

- hold a Standard 10 Certificate or an equivalent qualification;
- have passed one of the two official languages on the higher grade and the other on the lower or higher grade at Std 10 level; provided that an immigrant who has been resident in the Republic for less than four years and has not yet complied with this requirement, may be admitted provisionally;
- hold a qualification evaluated by the Committee of Education Heads as M+3(category C) and which included two recognized school subjects.

The curriculum extends over at least two years.

Tertiary teacher's course

Diploma in Tertiary Education - D.T.E.: A student must hold at least a Bachelor's degree. The Diploma will not, however, be issued until a student has completed at least two years' appropriate experience in an institution providing training at tertiary level.

The examination consists of two parts which may be written separately or simultaneously.

Secondary and/or primary teachers' courses

Certificate in School Library Science

(N.B. This certificate does not comply with the criteria for the evaluation of South African qualifications for purposes of employment in Provincial Education Departments.)

A student must hold:

- A lower diploma in Library Science; or
- a teacher's certificate; or
- a university degree.

The curriculum extends over at least one academic year.

Diploma in Special Education: School Library Science: At least one academic year after

- an approved three-year or four-year teacher's diploma; or
- an approved degree and an approved post-graduate education diploma; or
- an approved combined education degree.

Pre-Primary teachers' courses

Higher Education Diploma (Pre-Primary) - H.E.D.(Pre-Primary)
and

Higher Education Diploma (Post-graduate Pre-Primary) - H.E.D.
(Post-graduate Pre-Primary): At least two years after:

- A recognized teacher's diploma issued after a three-year teacher's training course; or
- a degree which includes the required number of courses in the approved school subjects, and at least one course in each of the official languages and at least one course in Education or at least one course in each of two of the following: Sociology, Psychology, Logopedics, Social Work.

Diploma in Nursery Education - D.N.E.:

(N.B. This Diploma does not comply with the criteria for the evaluation of South African qualifications for purposes of employment in Provincial Education Departments.)

The curriculum extends over at least two years after:

- A recognized two-year teacher's diploma for admission to which a Std 10 Certificate was required; or
- a degree with three courses in one and at least one course in another of the following subjects: Psychology, Sociology, Social Work, Education, Philosophy; or
- a degree, or a diploma for which a Std 10 Certificate was a prerequisite, in nursing, speech therapy, physiotherapy, occupational therapy or social work.

Other teachers' courses

Diploma in Specialized Education - D.S.E.

A. Special Education

The University offers teacher's diplomas in special education for:

- The visually handicapped (blind and partially-sighted);
- the aurally handicapped (deaf and hard of hearing);
- the epileptic;
- the cerebral palsied.

The curriculum extends over at least two years after:

- A recognized teacher's diploma issued after a three-year teacher's training course; or
- a degree and a recognized teacher's diploma.

B. Remedial Education

The curriculum extends over at least two years after:

- A recognized teacher's diploma issued after a three-year teacher's training course; or
- a degree and a recognized teacher's diploma.

Diploma for Therapists (Special Education) - D.T.S.E.: At least two years after an appropriate degree or an appropriate three-year diploma in Physiotherapy, or Occupational Therapy, or Speech Therapy by virtue of which the South African Medical and Dental Council has approved registration with the Council as a physiotherapist, or an occupational therapist, or a speech therapist.

Certificate in Special Education - C.S.E. (Special education for epileptics, the cerebral palsied, the visually handicapped, the aurally handicapped.)

(N.B. This Certificate is not recognized for salary purposes by the Department of National Education or the Provincial Education Departments. Teachers in the employment of, or who intend seeking employment with the Administration of Coloured Affairs, the Department of Indian Affairs or the Department of Bantu Education should enquire from these Departments about the recognition for salary purposes which they will receive for the possession of the C.S.E.)

The curriculum extends over at least two years after a recognized teacher's diploma issued after a two-year teacher's training course for admission to which a Std 10 Certificate was required.

UNIVERSITY OF STELLENBOSCH

Secondary teachers' courses

Bachelor of Agricultural Education: Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with passes in Mathematics and Physical Science or Standard Grade.

B.Sc. in Home Economics (Ed.): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with passes in Mathematics and Physical Science, of which at least one must be on the Higher Grade.

B. in Home Economics (Ed.): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics or Physical Science on the Standard Grade.

B.Mus.(Ed.) Specialization: Teaching of an Instrument or Singing

and

B.Mus.(Ed.) Specialization: School Music

As for B.Mus. See MUSIC p. 107.

Higher Education Diploma (Post-graduate)(Secondary) - H.E.D.: One year after a Bachelor's degree of a recognized university which includes the minimum number of school subjects.

Four-year Higher Education Diploma (Secondary) - H.E.D.: Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate. This Diploma may be obtained in the following specialized fields: Human Sciences and Languages; Natural Sciences; Commerce; Physical Education; Home Economics and Needlework.

Students who wish to specialize in Natural Sciences must hold a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics.

Higher Education Diploma (Secondary - Music) - H.E.D. (Secondary - Music): Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate, provided that the candidate has obtained

- a pass mark in Music of at least 50 per cent on the Higher Grade or 60 per cent on the Standard Grade in the Std 10 examination, or
- a pass in the Grade VII Examination (University of South Africa) in the practical major subject, with a standard in Harmony equivalent to Grade VI (University of South Africa), or
- a pass mark in the entrance examination, equivalent to the above-mentioned examinations in the practical major subject and in Harmony.

This Diploma may be obtained in the following specialized fields:

Teaching of an Instrument or Singing; School Music.

Primary teachers' courses

Bachelor's degree course in Primary Education (General field):

Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption), provided that the candidate has passed in at least one Mathematical/Arithmetical subject in the Junior Certificate (Standard 8) examination and obtained a satisfactory standard in both the official languages in the final examination in Std 9 and the June examination in Std 10.

A pass in Mathematics and a science subject on the Standard Grade in the Matriculation examination is required for admission to Mathematics III (Ed.) and Natural Science III (Ed.), respectively.

Bachelor's degree course in Primary Education with Specialization

in Learning and Educational Difficulties: Four years. The following are admitted:

- Students who have passed the second year of study for the Bachelor's degree course in Primary Education (General field); or, in the case of students from other training institutions, candidates who qualify for admission to the third year of study for the B. degree course in Primary Education (General field); and
- on written application are admitted to the course by the Senate, or by the Executive Committee acting for the Senate.

Bachelor's degree course in Primary Education with Specialization

in Physical Education: Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). Also see Bachelor's degree course in Primary Education (General field).

Bachelor's degree course in Primary Education with Specialization

in School Music: Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption), provided that the candidate

- obtained at least a 60 per cent pass mark in Music (examination subject) in Std 8; or
- passed the Grade VI (Intermediate) Examination in piano at the University of South Africa; or
- sat for an entrance examination in piano equivalent to the above-mentioned examinations.

A satisfactory standard in both the official languages must have been obtained in the final examination in Std 9 and in the June examination in Std 10.

Students must also give proof of a basic ability in the use of the singing voice.

Diploma in Specialized Education (School Librarianship): One year after an approved three or four-year teacher's diploma; or an approved degree followed by an approved teacher's diploma; or an approved combined education degree. Students who have already specialized in School Librarianship may not be admitted.

Higher Education Diploma (Primary) (School Music): One year after an approved three-year Primary Teachers' Diploma. Students must pass an entrance examination in Piano in which the standard of Grade VII of the University of South Africa is required. Candidates who obtained a pass during the preceding year in the Grade VII or higher examination in Piano of Unisa or the Associated Board of the Royal Schools of Music are exempted from the aforementioned entrance examination.

Persons who have already studied School Music as a intensive specialized field may not be admitted to this course.

Higher Education Diploma (Primary)(Speech and Drama): One year after an approved three-year Primary Teachers' Diploma. Persons who had Speech Training as a third-year subject for the Primary Teachers' Diploma may not be admitted.

Secondary and/or primary teacher's course,

Teachers' Licentiate in Music: Three years of full-time study after a Matriculation Certificate or a Standard 10 Certificate, provided the candidate has obtained

- a pass mark in Music of at least 60 per cent in the Standard 10 examination, or
- a pass in the Grade VII Examination (University of South Africa) in the practical major subject, with a standard in Harmony equivalent to Grade VI (University of South Africa), or
- a pass mark in the entrance examination, equivalent to the above-mentioned examinations, in the practical major subject and in Harmony.

Other teachers' courses

Diploma in Special Education: Three years after a recognized

degree with Psychology as a major subject as well as a teachers' certificate, or other qualifications approved by the Senate for this purpose. Candidates must already be employed as school psychologists and/or teachers of retarded children.

Candidates must attend intensive courses of two weeks each at the University of Stellenbosch twice a year.

Diploma in Specialized Education (Clinical Remedial): One year of full-time study after successful completion of at least a three-year teachers' training course; at least three years' teaching or other adequate experience and admission to the course through written application to the Senate.

Diploma in Specialized Education (Mentally Retarded): One year after:

- The Higher Primary Teachers' Diploma of this University or another three-year teachers' diploma or certificate which can be regarded as equivalent thereto; or
- a degree and the Higher Education Diploma of this University or equivalent qualifications.

Teachers' Diploma in Occupational Therapy: See p.196.

Diploma in Nursing Education: See p. 193.

UNIVERSITY OF THE WESTERN CAPE

Secondary teachers' courses

Lower Secondary Teacher's Diploma - L.S.T.D.: Three years after the Matriculation Certificate or the Standard 10 Certificate. The first two years are devoted to the study of academic subjects in one of the following fields: B.A., B.Sc., Commerce and subjects for the Diploma in Public Administration; and the third year to professional subjects.

Secondary Teacher's Diploma - S.T.D.: One year after a degree with at least one school subject passed at second-year level and one other school subject passed at third-year level.

Secondary Teacher's Diploma (Non-graduate) - S.T.D.(N/G): A student who has completed a full two-year course of study for the Bachelor's degree in such a way that all the requirements for a degree will be satisfied by one further year of study, shall be admitted to the final year of professional training for the S.T.D. (N/G).

Any person in possession of the S.T.D.(N/G) can have it changed into a full S.T.D. immediately on completion of the academic requirements for the Bachelor's degree.

Diploma in School Librarianship: One year of full-time study or two years of part-time study. The following may be admitted:

- Qualified teachers who have had at least two years' undergraduate or one year's post-graduate teacher training
- Candidates who need one course to complete the S.T.D. or the L.S.T.D.

No persons who have already received comprehensive training in Librarianship will be admitted.

Diploma in Music Teaching

Other teachers' courses

Adaptation Classes Teacher's Diploma - A.C.T.D.: One year of full-time study or at least two years of part-time study. Any student in possession of at least a Std 10 Certificate as well as an approved teacher's certificate, who has had teaching experience and who has been approved by the Department of Education as a suitable candidate, may be admitted.

Diploma in Nursing Education - D.N.E.: 1½ years' study. Proof of registration as a general nurse and 18 months' experience as a registered nurse.

UNIVERSITY OF THE WITWATERSRAND

Secondary teachers' courses

Higher Education Diploma (Post-graduate): One year of full-time study or two years of part-time study after an approved degree which includes a suitable combination of school teaching subjects.

Higher Education Diploma: Four years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). The Senate may, for an interim period until the end of 1979, grant admission to a person who is not so qualified but who holds an approved Std 10 Certificate.

Every curriculum shall include, inter alia:

- Four courses in one of the following practical subjects, one

course in each year of the curriculum:

- . Home Economics
 - . Industrial Arts
 - . Instrumental Music Performance
 - . Physical Education
 - . Typewriting
- courses in certain prescribed academic subjects.

Secondary and/or primary teachers' courses

Licentiate in Music - L.M.: Three years of full-time study after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Performer's Diploma in Music - P.Dip.Mus.: One year of full-time study or two years of part-time study after

- the Diploma in Music of this or another university; or
- the Licentiate in Music; or
- the B.Mus. degree; or
- a teacher's or performer's diploma or licentiate in music from a recognized institute and at least four years' experience in education or four years' experience in public performance.

Other teachers' courses

Diploma in Education of the Deaf: Two years after

- a recognized teacher's diploma obtained after not less than two years' study after having obtained a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption); and
- the curriculum for the teacher's diploma must have contained an approved course in Psychology and courses in spoken English and spoken Afrikaans.

Diploma in Specialized Education (Remedial Education) - Dip.Spec. Ed. (Rem.Ed.): Two years of part-time study after

- a degree and a recognized teachers' diploma and at least two years' experience in education; or
- a recognized teachers' diploma and a Standard 10 Certificate

(Matriculation Exemption) and at least five years' experience in education; or

- a degree and at least three years' experience in education.

Diploma in Nursing Education: See p. 193.

Diploma in Physiotherapy Education: See p. 198.

UNIVERSITY OF ZULULAND

Secondary teachers' courses

Secondary Teacher's Diploma - S.T.D.: Two years after a Matriculation Certificate or a Standard 10 Certificate.

University Education Diploma - U.E.D.: One year after a Bachelor's degree which includes the prescribed number of courses in school subjects.

University Education Diploma (non-graduate) - U.E.D.(non-graduate): One year. A student who has completed two full years of study towards a Bachelor's degree in such a manner that all the requirements for the degree may be fulfilled by one further year of study, may be admitted.

Any holder of the U.E.D.(non-graduate) may have it converted into a full U.E.D. by completing the Bachelor's degree concerned.

Baccalaureus Pedonomiae - B.Ped.: Four years after a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). A student shall satisfy the requirements of one of the following three curricula: Arts, Commerce or Science. Three successive courses in Pedagogics as first major are compulsory.

PHYSICAL EDUCATION

Universities: Durban-Westville, Orange Free State, Potchefstroom, Pretoria, Rhodes, Stellenbosch.

Degrees

First degrees

Baccalaureus Artium in Physical Education: B.A.(Phys.Ed.)
(UDW)

Bachelor of Arts (Physical Education): B.A.(Phys.Ed.) (UOFS, RU)

Bachelor of Arts with Physical Education as a major subject: B.A. (PU for CHE, US)

Bachelor of Science with Physical Education as a major subject: B.Sc. (PU for CHE, US)

Bachelor of Arts in Physical Education: B.A.(Phys.Ed.) (UP)

Bachelor of Arts (Education)(Physical Education): B.A.(Ed.) (Phys.Ed.) (UP)

Honours degrees

Honoris Baccalaureus Artium in Physical Education: B.A.(Phys. Ed.) Hons. (UDW)

Honours Bachelor of Arts (Physical Education): B.A.(Hons.) (Phys.Ed.) (UOFS)

Honours Bachelor of Arts: Honns.B.A. (PU for CHE)

Honours Bachelor of Science: Honns.B.Sc. (PU for CHE)

Bachelor of Arts (Honours) in Physical Education: B.A.(Phys.Ed.) (Hons.) (UP)

Bachelor of Arts with Honours: B.A.(Hons.) (RU)

Honours B. in Physical Education (US)

Master's degrees

Magister Artium in Physical Education: M.A.(Phys.Ed.) (UDW)

Master of Arts (Physical Education): M.A.(Phys.Ed.) (UOFS)

Master of Arts: M.A. (PU for CHE, RU)

Master of Science: M.Sc. (PU for CHE)

Master of Arts in Physical Education: M.A. (Phys.Ed.) (UP)

M. in Physical Education (US)

Doctor's degrees

Doctor Philosophiae: D.Phil. (UDW, UOFS, PU for CHE, UP)

Doctor of Science: D.Sc. (PU for CHE)

Doctor of Philosophy: Ph.D. (RU)

Ph.D.(Physical Education) (US)

Bachelor's degree course in Primary Education with specializa-
tion in Physical Education (US) See EDUCATION p. 163.

Baccalaureus Artium in Physical Education: B.A.(Phys.Ed.) or

Bachelor of Arts (Physical Education): B.A.(Phys.Ed.) or

Bachelor of Arts in Physical Education: B.A.(Phys.Ed.) or

Bachelor of Arts: B.A.

(Durban-Westville, Orange Free State, Potchefstroom, Pretoria,
Rhodes, Stellenbosch)

Admission: Matriculation Certificate or a Standard 10 Certifi-
cate (Matriculation Exemption). A medical certificate is
required.

Additional requirements: As for the B.A. degree.

Duration: Three years of full-time study. Students follow the
curriculum for the ordinary B.A. degree with Physical Education
as one of the two required major subjects.

Bachelor of Science with Physical Education: B.Sc. (Potchef-
stroom, Stellenbosch)

Admission: As for the B.Sc. degree. Students must be medically
fit.

Duration: Three years of full-time study.

Students follow the curriculum for the ordinary B.Sc. degree
with Physical Education as one of the two major subjects.

Bachelor of Arts (Education)(Physical Education): B.A.(Ed.)
(Phys.Ed.) (Pretoria)

Admission: As for the B.A. degree, with Afrikaans and English
as subjects passed.

Duration: Four years of full-time study.

Diplomas

Diploma in Physical Education: Dip.Phys.Ed. (RU)

Diploma in Sports Coaching and Recreation (US)

The following universities offer a four-year teacher's diploma course with Physical Education as one of the specializations: Fort Hare (three-year diploma), Orange Free State, Port Elizabeth, Pretoria, Rand Afrikaans, Stellenbosch and the Witwatersrand. See EDUCATION.

Diploma in Physical Education: Dip.Phys.Ed. (Rhodes)

Admission: Bachelor's degree or a recognized teacher's diploma; and a medical certificate.

Duration: One year of full-time study.

Diploma in Sports Coaching and Recreation
(Stellenbosch)

Admission: A limited number of selected, medically fit persons who hold recognized teaching qualifications.

Duration: One year of full-time study.

Note: The University of Port Elizabeth offers a four-year degree course in Physical Education from 1977.

FACTULTY OF ENGINEERING

ENGINEERING

LAND SURVEYING

ENGINEERING

Universities: Cape Town, Durban-Westville, Natal, Potchefstroom, Pretoria, Rand Afrikaans University, Stellenbosch, Witwatersrand.

The Universities of the Orange Free State and Port Elizabeth offer training in Engineering up to second-year level.

Degrees

First degrees

Bachelor of Science in Engineering: B.Sc.(Eng.) or B.Sc.Eng. (UCT, UN, UW)

Bachelor of Engineering: B.Eng. (UDW, US) or B.Sc.(Eng.) (UP)

Bachelor of Science in Electrical Engineering: B.Sc.Eng.(Electr.) (US)

Bachelor of Science (Electrotechnics): B.Sc.(Electrotechnics) (PU for CHE)

Bachelor of Science (Engineering Chemistry): B.Sc.(Engineering Chemistry) (PU for CHE)

Honours degrees

Bachelor of Engineering (Honours): B.Sc.(Eng.)(Hons.) (UP)

Honours Bachelor of Science Electrical Engineering: B.Sc.Hons. Electrical Engineering (RAU)

Honours Bachelor of Science in Electrical Engineering: Hons. B.Sc.(Electr.) (US)

Honours Bachelor of Engineering: Hons.B.Eng. (US)

Honours Bachelor of Science (Electrotechnics): Hons.B.Sc. (Electrotechnics) (PU for CHE)

Master's degrees:

Master of Science in Engineering: M.Sc.(Eng.) or M.Sc.Eng. (UCT, UN, UW)

Master of Engineering: M.Eng. (UDW, US) or M.Sc.(Eng.) (UP)

Magister Scientiae (Electrotechnics): M.Sc.(Electrotechnics)
(PU for CHE)

Master of Science: M.Sc. (RAU)

Master of Engineering (field of Rocket Engineering) together with
the Diploma in Advanced Engineering (field of Rocket Engineering):
M.Eng. and Dipl. Adv. Eng.(Field of Rocket Engineering) (US)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UN, UW)

Doctor of Philosophy (Electrical Engineering): Ph.D.(Electrical
Engineering) (RAU)

Doctor of Philosophy (Engineering): Ph.D.(Eng.) (US)

Doctor of Science in Engineering: D.Sc.(Eng.) or D.Sc.Eng.
(UCT, UN, UW)

Doctor of Engineering: D.Eng. (UDW, US, UW) or D.Sc.(Eng.)
(UP)

Doctor Scientiae (Electrotechnics): D.Sc.(Electrotechnics)
(PU for CHE)

Bachelor of Science in Engineering: B.Sc.(Eng.) or B.Sc.Eng. or

Bachelor of Engineering: B.Eng. or B.Sc.(Eng.) or

Bachelor of Science in Electrical Engineering: B.Sc.Eng.(Electr.)
or

Bachelor of Science (Electrotechnics): B.Sc.(Electrotechnics) or

Bachelor of Science (Engineering Chemistry): B.Sc. (Engineering
Chemistry)

(All the above-mentioned universities except RAU)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: A pass in Mathematics and Physical Science on the
Higher Grade at not less than 50 per cent.

Durban-Westville: A pass of at least 50 per cent in Mathematics
and a pass in Physical Science, both on the Higher Grade.

Natal: Passes in Mathematics and Physical Science or Chemistry
and Physics.

Potchefstroom: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade and a pass in a science subject, preferably Physical Science, on the Standard Grade at least.

Pretoria: As for the B.Sc. degree. See p.202.

Stellenbosch: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade and a pass in Physical Science on the Standard Grade at least.

Witwatersrand: Passes in Mathematics and Physical Science on the Higher Grade or at least 60 per cent on the Standard Grade.

Duration: Four years of full-time study except at the Universities of Durban-Westville and Stellenbosch. At Durban-Westville the course extends over five years of full-time study plus one year of practical training. At Stellenbosch the B.Eng. course extends over five years of full-time study and the B.Sc.Eng. (Electr.) course over four years of full-time study.

Potchefstroom offers training in the other fields of Engineering up to second-year level.

Honours Bachelor of Science Electrical Engineering: B.Sc.Hons. Electrical Engineering (Rand Afrikaans University)

Admission: As for the B.Sc. degree. See p.202.

Duration: 4 years of full-time study.

This course is equivalent to a B.Sc.Eng. degree in Electrical Engineering. It may lead to an M.Sc. and Ph.D. degrees in Electrical Engineering.

The Rand Afrikaans University offers training in Civil and Mechanical Engineering up to second-year level.

Diplomas

Diploma in Engineering (UCT, UN)

Diploma in Mining (UP)

Graduate Diploma in Engineering (UW)

Post-graduate Diplomas in Engineering:

- Post-graduate Diplomas in Mechanical Engineering
- Post-graduate Diplomas in Electrical Engineering (US)

Diploma in Engineering (Cape Town)

Admission: A recognized degree or suitable professional qualifications.

Duration: Eight courses each consisting of approximately thirty hours of lectures, tutorials, seminars and laboratory work.

Diploma in Engineering (Natal)

Admission: B.Sc. Eng.

Duration: At least one semester of study.

Diploma in Mining (Pretoria)

Admission: A Bachelor's degree in any branch of Engineering or a Bachelor's degree in Mining Geology or the status thereof.

Duration: A minimum of one year of full-time study.

Graduate Diploma in Engineering (Witwatersrand)

Admission: B.Sc.Eng. or B.Sc. with Honours.

Duration: One year of full-time study or three years of part-time study.

Post-graduate Diplomas in Engineering (Stellenbosch)

Admission: An approved Bachelor's degree in Engineering or other acceptable academic degree qualification and relevant experience.

Duration: One year of full-time study.

The Post-graduate Diploma in Engineering is offered in the following branches:

- Post-graduate Diplomas in Mechanical Engineering: The Diploma may be awarded in one of the following options: Machine Construction, Industrial option, Refrigeration and Air Conditioning, Marine option, Automobile option and Aeronautical Science.
- Post-graduate Diplomas in Electrical Engineering: The Diploma may be awarded in one of the following options: Heavy current, Low-tension current and Marine option.

LAND SURVEYING

Universities: Cape Town, Fort Hare, Natal, Pretoria, Witwatersrand.

Degrees

First degrees

Bachelor of Science in Land Surveying: B.Sc.(Survey.) (UCT)
or B.Sc.Sur. (UN)

Bachelor of Science (Land Surveying): B.Sc.(Land Surveying)
(UFH)

Bachelor of Land Surveying: B.Sc.(Land Surveying) (UP)

Bachelor of Science in Engineering: B.Sc.(Eng.) (UW)

Master's degrees

Master of Science in Engineering: M.Sc.(Eng.) (UCT, UW)

Master of Science in Land Surveying: M.Sc.Sur. (UN)

Master of Land Surveying: M.Sc.(Land Surveying) (UP)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UN, UW)

Doctor of Science in Engineering: D.Sc.(Eng.) (UCT, UW)

Doctor of Science in Land Surveying: D.Sc.Sur. (UN)

Doctor of Land Surveying: D.Sc. (Land Surveying) (UP)

Doctor of Engineering: D.Eng. (UW)

Bachelor of Science in Land Surveying: B.Sc.(Survey.) or B.Sc.
Sur. or

Bachelor of Science (Land Surveying): B.Sc.(Land Surveying), or

Bachelor of Land Surveying: B.Sc.(Land Surveying), or

Bachelor of Science in Engineering: B.Sc.(Eng.),

(All the above-mentioned universities)

Admission: As for the Engineering degree.

Fort Hare: As for the B.Sc. degree. See p.201.

Duration: Four years of full-time study.

Diploma

Diploma in Photogrammetry, (Natal)

Admission: An approved degree, a professional qualification in Civil Engineering or Surveying or other acceptable qualifications.

Duration: One year of full-time study or at least two but not more than three years of part-time study.

FACULTY OF FORESTRY

FORESTRY

WOOD TECHNOLOGY

PARKS AND RECREATION ADMINISTRATION

NATURE CONSERVATION

FORESTRY

University: Stellenbosch.

Degrees

Bachelor of Science in Forestry: B.Sc. in Forestry

Honours Bachelor of Science in Forestry: Honours B.Sc. in Forestry

Master of Science in Forestry: M.Sc. in Forestry

Doctor of Philosophy (Forestry): Ph.D. (Forestry)

Doctor of Science in Forestry: D.Sc. in Forestry

Bachelor of Science in Forestry: B.Sc. in Forestry

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with passes in Mathematics and Physical Science on the Standard Grade. Prospective students are strongly advised to take Biology for the Std 10 examination.

Duration: Four years of full-time study.

WOOD TECHNOLOGY

University: Stellenbosch.

Degrees

Bachelor of Science in Wood Technology: B.Sc. in Wood Technology

Honours Bachelor of Science in Wood Technology: Honours B.Sc. in Wood Technology

Master of Science in Wood Technology: M.Sc. in Wood Technology

Doctor of Philosophy: Ph.D. (Wood Technology)

Doctor of Science in Wood Technology: D.Sc. (Wood Technology)

Bachelor of Science in Wood Technology: B.Sc. in Wood Technology

Admission: As for B.Sc. in Forestry.

Duration: Four years of full-time study.

PARKS AND RECREATION ADMINISTRATION

University: Stellenbosch.

Degree

B. in Parks and Recreation Administration

Admission: As for B.Sc. in Forestry.

Duration: Four years of full-time study.

NATURE CONSERVATION

University: Stellenbosch.

Degrees

Hons.B.Sc. in Nature Conservation

M.Sc. in Nature Conservation

Ph.D. (Nature Conservation)

D.Sc. in Nature Conservation

Hons.B.Sc. in Nature Conservation

Admission: A B.Sc. degree with Zoology, Botany or Biology as one of the major subjects.

Duration: At least one year.

The University of Pretoria also offers post-graduate degrees in Nature Conservation. See FACULTY OF SCIENCE p. 205.

FACULTY OF LAW

LAW

Universities: All the universities in the Republic of South Africa.

Degrees

First degrees

Baccalaureus Procuratoris: B.Proc. (All the universities except US)

Bachelor of Law or Baccalaureus Juris:

B. Iuris (UDW, RAU)

B. Iur. (UNorth, UOFS, UP, Unisa)

B. Jur. (UFH, PU for CHE, UZ)

B. Juris (UPE)

Bachelor of Laws or Baccalaureus Legum: LL.B. (All the universities)

Master's degree

Master of Laws or Magister Legum: LL.M. (All the universities except UOFS, UWC and UZ)

Doctor's degrees

Doctor of Laws or Doctor Legum: LL.D. (All the universities except UZ)

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW)

Baccalaureus Procuratoris: B.Proc.

(All the universities except Stellenbosch)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Durban-Westville: An aggregate pass of at least 45 per cent in the Std 10 examination and a pass of at least 40 per cent in Latin on the Higher Grade or a pass in Latin Special at the University.

Pretoria: A pass in Mathematics or a third language on the Higher Grade or at least 40 per cent on the Standard Grade.

Rand Afrikaans University: A pass of at least 40 per cent in Latin on the Higher Grade or a pass in a special course in Latin at the University.

Rhodes: A pass in Latin on the Higher or Standard Grade.

Witwatersrand: A pass on the Higher Grade in two of the following subjects: Afrikaans, Bantu Language, Biology, English, French, Geography, German, Hebrew, History, Latin, Mathematics, Physical Science, Physiology.

Zululand: A student should have passed in English on matriculation standard. Exemption from Latin Special is granted if Latin is passed on matriculation standard: provided that a student passes in a non-legal course.

Duration: Four years of full-time study or five years of part-time study.

This degree provides training for students who wish to qualify as attorneys.

No student will be allowed to take Roman Law I unless he has passed Std 10 Latin or is exempt from this requirement by virtue of another examination.

Bachelor of Law: B.Iuris or B.Iur. or B.Jur. or B.Juris

(Durban-Westville, Fort Hare, North, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, Rand Afrikaans University, South Africa, Zululand)

Admission: As for the B.Proc. degree.

Duration: Three years of full-time study or four years of part-time study. The course extends over four years of full-time study at the University of the North.

Bachelor of Laws: LL.B.

(All the universities except Pretoria)

Admission: A Bachelor's degree, or a B.Proc. or B.Iuris degree.

Duration: Three years of full-time study or two years of full-time study after a B.Proc. or B.Iuris degree or other Bachelor's degree which included the required Law subjects in the curriculum. Four years at the Universities of the North and Zululand.

Bachelor of Laws: LL.B. (Pretoria)

Admission: As for the B.Proc. degree.

Duration: Five years of full-time study. May be shortened to three years if a candidate holds a Bachelor's degree.

Diplomas and Certificates

Public Service Law Certificate (UFH)

Natal Public Service Law Certificate: N.P.S.L.C. (UN)

Public Service Law Examination (UNorth, UP, Unisa)

Diploma in Law for Public Servants (UOFS)

Public Service Law Diploma (UPE)

Law Diploma for Public Servants (PU for CHE)

Senior Law Diploma for Public Servants (PU for CHE)

Public Service Senior Law Examination (UP, Unisa)

Higher Diploma in Tax Law: H.Dip. Tax Law (UW)

Diploma Juris (UZ)

Diploma Legum (UZ)

Public Service Law Certificate or

Natal Public Service Law Certificate or

Public Service Law Examination or

Diploma in Law for Public Servants, or

Public Service Law Diploma or

Law Diploma for Public Servants

(Fort Hare, Natal, North, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, South Africa)

Admission: Standard 10 Certificate or a certificate of conditional exemption issued to candidates from foreign countries.

Duration: Three years of full-time study or four years of part-time study.

Senior Law Diploma for Public Servants, (Potchefstroom)

Admission: Law Diploma for Public Servants or the degree of B.Juris for public servants or a degree or diploma which has been certified by the Board for the Recognition of Examinations in Law as equivalent.

Duration: Two years.

Public Service Senior Law Examination (Pretoria, South Africa)

Admission: A student must have passed the Public Service Law Examination or another equivalent examination.

Duration: Two years.

Higher Diploma in Tax Law: H.Dip.Tax Law (Witwatersrand)

Admission: LL.B. or the B.Proc. degree or an approved academic or professional qualification or be an attorney.

Duration: Two years of part-time study.

Diploma Juris (Zululand)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study.

This Diploma is also offered by the University's Institute for Public Service Training. The curricula are not identical.

Diploma Legum (Zululand)

Admission: A certificate in Public Service Law Examination or any equivalent qualification.

Duration: Two years

The Board for the Recognition of Professional Examinations in Law regard the Diploma Juris of the Institute for Public Service Training as the equivalent of the Public Service Law Examination and the Diploma Legum (also offered by the Institute) as the equivalent of the Senior Public Service Law Examination.

FACULTY OF MEDICINE

MEDICINE

NURSING

OCCUPATIONAL THERAPY

PHYSIOTHERAPY

RADIOGRAPHY

MEDICINE

Universities: Cape Town, Natal (Non-Whites only), Orange Free State, Pretoria, Stellenbosch, Witwatersrand.

Degrees

Bachelor of Medicine and Bachelor of Surgery: M.B., Ch.B. or B.M., B.Ch. or M.B., B.Ch. or

Bachelor of Medicine: B.M. (UOFS)

Master of Medicine: M.Med.

Doctor of Medicine: M.D. of D.M.

Bachelor of Medicine: B.M. or

Bachelor of Medicine and Bachelor of Surgery: M.B., Ch.B. or B.M., B.Ch. or M.B., B.Ch.

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: A pass in Mathematics on the Higher Grade or not less than 50 per cent on the Standard Grade.

Natal: Matriculation pass of a sufficiently high standard and a pass in Mathematics.

Orange Free State: A pass in Mathematics on the Standard Grade. Prospective students are advised to offer Physical Science, and, if possible, Biology as well for the Std 10 examination.

Pretoria: As for the B.Sc. degree. See p. 202.

Stellenbosch: A pass in Mathematics on the Higher or Standard Grade. Prospective students are strongly advised to offer

Physical Science and/or Biology and/or Physiology for the Std 10 examination.

Witwatersrand: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade. See also admission requirements for the B.D.S. degree p.140.

Duration: Six years of full-time study plus one year of internship. The University of the Orange Free State requires two years of internship.

Master of Medicine: M.Med.

Admission: The degree of M.B., Ch.B. must have been held for at least two years. Candidates must have been registered as medical practitioners for at least one year.

Duration: 3, 4 or 5 years according to the requirements of the department concerned.

Universities: The degree is offered as follows in the various branches by the universities mentioned:

Anaesthetics - UCT, UN, UOFS, UP, US

Cardio-Thoracic Surgery - UOFS

Community Medicine - UCT

Dermatology - UCT, UN, UOFS, UP, US

Forensic Medicine - UOFS, UP

Geriatrics - UP

Haematology - UOFS

Internal Medicine - UOFS, UP, US

Endorsement: (i) Military - UP

(ii) Oncochemotherapy - UP

Medical Administration - UP

Medicine - UCT, UN

Neurology - UP

Neurosurgery - UCT, UOFS, UP, US

Nuclear Medicine - UCT

Obstetrics and Gynaecology - UCT, UN, UOFS, UP, US

Ophthalmology - UCT, UN, UOFS, UP, US

Endorsement: Military - UP

Orthopaedics - UCT, UOFS, UP, US

Otorhinolaryngology - UCT, UN, UOFS, UP, US

Endorsement: Military - UP

Paediatrics - UCT, UOFS, UP, US

Paediatrics and Child Health - UN

Pathology - UN, UP, UW

Pathology (Anatomical) - UCT, UOFS, US

Pathology (Chemical) - UCT, UOFS, US

Pathology (Clinical) - UCT, UOFS, US

Pathology (Forensic) - UCT, UW

Pathology (Haematological) - UCT

Pathology (Microbiology) - UCT, UOFS, US

Physical Medicine - UP

Plastic and Reconstructive Surgery - UCT, UP, US

Plastic Surgery - UOFS, UP

Preventive Medicine - UP

Psychiatry - UOFS, UP, US

Endorsement (i) Military - UP

(ii) Paediatrics - UP

Radiology - UN

Radiodiagnosis/Diagnostic Radiology - UCT, UN, UOFS, UP, US, UW

Radiotherapy/Radiation Therapy/Therapeutic Radiology - UCT, UN, UOFS, UP, US, UW

Surgery - UCT, UN, UOFS, UP, US

Thoracic Surgery - UCT, UP, US

Urology - UCT, UOFS, UP, US

The following degrees are also offered by the universities mentioned:

First degrees

Bachelor of Science in Medicine: B.Sc.(Med.) (UCT)

Bachelor of Science (Medical Science): B.Sc.(Med.Sc.) (UN)

Bachelor of Medical Sciences: B.Med.Sc. (UOFS) or B.Med.Sci. (UP)

Bachelor of Science in Pathology: B.Sc.(Path.) (UW)

Honours degrees

Bachelor of Science in Medicine (Honours): B.Sc.Med.(Hons.)
(UCT)

Bachelor of Medical Sciences (Honours): B.Med.Sc.(Hons.)
(UOFS)

Honours Bachelor of Science in Medical Sciences: Hons.B.Sc. in
Medical Sciences (US)

Master's degrees

Master of Surgery: Ch.M. (UCT, UW)

Master of Medical Sciences: M.Med.Sc. (UOFS) or M.Med.Sci.
(UP)

Master of Military Medicine: M.Mil.Med. (UP)

Master of Family Doctor Medical Practice: M.Prax.Med. (UP)

Master of Pharmacological Medicine: M.Pharm.Med. (UP)

Master of Science in Medical Sciences: M.Sc. in Medical Sciences
(US)

Master of Orthopaedic Surgery: Ch.M.(Orth.) (UW)

Master of Science in Medicine: M.Sc.(Med.) (UW)

Doctor's degrees

Doctor of Medical Sciences: D.Phil. (UOFS) or D.Med.Sci.
(UP)

Doctor of Philosophy: Ph.D. (UCT, UW)

Doctor of Philosophy in Medicine: Ph.D.(Med.) (US, UW)

Doctor of Philosophy in Medical Sciences: Ph.D. in Medical
Sciences (US)

Doctor of Science in Medical Sciences: D.Sc. in Medical Sciences
(US)

Doctor of Science (Medicine): D.Sc.(Med.) (US)

Bachelor of Science in Medicine: B.Sc.Med. (Cape Town)

Admission: As for the M.B., Ch.B. degree.

Duration: Three years of full-time study.

A candidate may be registered concurrently for the B.Sc.(Med.)
and the M.B., Ch.B. degrees.

Bachelor of Science (Medical Science): B.Sc.(Med.Sc.) (Natal)

Admission: As for the M.B., Ch.B. degree.

Duration: Four years of full-time study.

The first three years of the course are as for the degree of M.B., Ch.B.

Bachelor of Medical Sciences: B.Med.Sc. (Orange Free State)

Admission: As for the B.M. degree.

Duration: Three years of full-time study.

Students who passed in B.M. II may be admitted to B.Med.Sc.III.

Bachelor of Medical Sciences: B.Med.Sci. (Pretoria)

Admission: As for the B.Sc. degree. See p.202. Only 25 students are selected per annum.

Duration: Three years of full-time study.

Bachelor of Science in Pathology: B.Sc.(Path.) (Witwatersrand)

Admission: As for the M.B., B.Ch. degree.

Duration: Four years of full-time study.

A student who passed the courses prescribed for the first three years of study for the M.B., B.Ch. degree or the B.D.S.(Dentistry) degree may be admitted to B.Sc.(Path.) IV.

Diplomas (Undergraduate)

Diploma in Orthoptics (UW)

Diploma in Orthoptics: Dip.Orthopt.

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). The student must be physically fit.

Duration: Two years of full-time study.

Diplomas (Post-graduate)

Diploma in Anaesthetics (UW)

Diploma in Community Health (US)
Diploma in Community Medicine (UCT)
Diploma in Industrial Medicine (UP)
Diploma in Medical Administration (UP)
Diploma in Medical Physics (post-M.Sc. in Physics) (UP)
Diploma in Medicine (UW)
Diploma in Obstetrics and Gynaecology (UW)
Diploma in Occupational Health (UW)
Diploma in Occupational Medicine (US)
Diploma in Physical Medicine (UW)
Diploma in Psychological Medicine (UCT, UW)
Diploma in Public Health (UP, UW)
Diploma in Surgery (UW)
Diploma in Tropical Medicine and Hygiene (UW)

MEDICAL TRAINING FOR BLACK STUDENTS

First-year medical training is at present offered at the three universities for Blacks and further training at the Medical School of the University of Natal.

As from 1978, Black students enrolling for their second-year will be trained at the Medical University of South Africa which will have its campus adjacent to the Ga-Rankuwa Hospital, Pretoria. This university will also train Black students in Dentistry and Veterinary Science.

NURSING

Universities: Cape Town, Natal, North, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, Rand Afrikaans University, Stellenbosch, Western Cape, Witwatersrand.

The Department of Nursing falls under the Faculty of Medicine at the Universities of Cape Town, Pretoria, Stellenbosch and the Witwatersrand. At the Universities of Natal and the Orange Free State it falls under the Faculty of Social Science and at the Universities of Port Elizabeth, the Western Cape and Potchefstroom under the Faculty of Arts. At the Rand Afrikaans University it falls under the Faculty of Education and at the Univer=

sity of the North under the Faculty of Mathematics and Natural Sciences.

Degrees

First degrees

Bachelor of Science in Nursing: B.Sc.(Nurs.) (UCT) or B.Sc. (Nursing) (UW)

Bachelor of Social Science (qualified as a nurse): B.Soc.Sc. (UN)

Bachelor of Science (Nursing Education and Administration): B.Sc. (Nursing - E. and A.) (UNorth)

Baccalaureus Curationis (Instructionis et Administrationis): B.Cur.(I.et A.) (UNorth)

Baccalaureus Societatis Scientiae in Nursing: B.Soc.Sc.(Nursing) (UOFS)

Baccalaureus Curationis: B.Cur. (UPE)

Baccalaureus Curationis (Institutionis et Administrationis): B.Cur.(I. et A.) (UPE)

Baccalaureus Artium et Scientiae (Nursing): B.Art. et Scien. (Nursing) (PU for CHE)

Bachelor of Nursing: B.Cur. (UP, RAU)

Bachelor of Nursing (Instruction and Administration): B.Cur. (I. et A.) (UP)

Bachelor of Nursing Instruction and Administration: B.Cur. (Ed. et Adm.) (RAU)

Bachelor of Nursing: B.Nursing (US)

Baccalaureus of Nursing: B.Nursing (UWC)

Honours degrees

Bachelor of Social Science (Honours): B.Soc.Sc.Hons. (UN)

Honneurs-Baccalaureus Societatis Scientiae in Nursing: B.Soc. Sc.(Hons.)(Nursing) (UOFS)

Honours Bachelor in Nursing: Hons.B.Nursing (US)

Master's degrees

Master of Social Science: M.Soc.Sc. (UN)

Magister Societatis Scientiae in Nursing: M.Soc.Sc.(Nursing) (UOFS)

Magister Curationis: M.Cur. (UPE)

Magister Artium: M.A. (PU for CHE)

Master in Nursing: M.Cur. (UP) or
M.Nursing (US)

Master of Nursing: M.Nursing (UWC)

Master of Science in Nursing: M.Sc.(Nursing) (UW)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UN)

Doctor of Social Science: D.Soc.Sc. (UN)

Doctor Societatis Scientiae in Nursing: D.Soc.Sc.(Nursing)
(UOFS)

Doctor Curationis: D.Cur. (UPE)

Doctor Philosophiae: D. Phil. (PU for CHE)

Doctor of Nursing: D.Cur. (UP)

Bachelor of Science in Nursing: B.Sc.(Nurs.) (Cape Town)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with a pass in Mathematics on the Standard Grade. It is recommended that Physical Science, Physics or Chemistry or Biology be a subject for the Std 10 examination.

Every candidate must submit a certificate of medical fitness and be at least 17 years of age.

Successful applicants will assume full-time duty as student nurses at the Groote Schuur Hospital for a probationary period of two months commencing in January. At the end of the probationary period the final selection will be made for admission.

Duration: Four years. Practical nursing experience is carried out in co-operation with nurses and other staff of the Groote Schuur Hospital.

Baccalaureus in Nursing: B.Nursing (Western Cape)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). Only a limited number of candidates will be admitted to the course.

Duration: During the four-and-a-half years of study students remain on the establishment of the Tygerberg Hospital as student nurses.

Bachelor of Social Science (qualified as a nurse): B.Soc.Sc. or
Baccalaureus Societatis Scientiae in Nursing: B.Soc.Sc.(Nursing)
or

Baccalaureus Curationis: B.Cur. or

Baccalaureus Artium et Scientiae (Nursing): B.Art. et Scien.
(Nursing) or

Bachelor of Nursing: B.Cur. or B.Nursing or

Bachelor of Science in Nursing: B.Sc.(Nursing)

(All the above-mentioned universities except the universities of Cape Town, the North and the Western Cape)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) and proof of enrolment as a student nurse at a training hospital approved by the South African Nursing Council.

Additional requirements:

Port Elizabeth, Pretoria, Rand Afrikaans University: Mathematics or Physical Science at matriculation level will be a strong recommendation.

Witwatersrand: A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade and a pass in one of the following subjects if Mathematics has been passed on the Higher Grade or two of the following subjects if Mathematics has been passed on the Standard Grade: Bantu Language, Biology, French, Geography, German, Hebrew, History, Latin, Physical Science, Physiology.

Duration: Three years (Orange Free State); four years (Natal, Potchefstroom, Rand Afrikaans University, Stellenbosch, Witwatersrand); four and a half years (Port Elizabeth, Pretoria).

Students at the University of the Orange Free State will only be able to register with the S.A. Nursing Council after obtaining the degree of B.Soc.Sc.(Hons.)(Nursing). The course for this degree extends over three semesters.

Baccalaureus Curationis (Instructionis et Administrationis):
B.Cur. (I. et A.) (North) and

Bachelor of Science (Nursing Education and Administration):
B.Sc. (Nursing - E. and A.) (North) or

Baccalaureus Curationis (Institutionis et Administrationis):

B.Cur. (I. et A.) or

Bachelor of Nursing (Instruction and Administration): B.Cur. (I. et A.) or

Bachelor of Nursing Instruction and Administration: B.Cur.(Ed. et Adm.)

(North, Port Elizabeth, Pretoria, Rand Afrikaans University)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) and proof of registration as a nurse/ male nurse with the S.A. Nursing Council.

Additional requirements:

North: At least 18 months' experience as a registered nurse/ male nurse in hospital or extra-institutional health services.

Port Elizabeth, Pretoria and Rand Afrikaans University: A candidate who wishes to take Promotive and Preventive Health Care II with a view to recognition by the S.A. Nursing Council as a Community Health Nurse, must submit proof of registration as a midwife or as a general nurse and psychiatric nurse.

Duration: Three years of full-time study or four years of part-time study.

Diplomas and Certificate

University Diploma in Nursing Education (UN)

Diploma in Nursing (General, Midwifery, Psychiatry) (UOFS)

Post-Basic Diplomas in Nursing (UOFS)

Diploma in Nursing Education: D.N.E. (UNorth, UPE, PU for CHE, UP, RAU, US, UWC, UW)

Diploma in Nursing Administration: D.N.A. (UNorth, UP, US, UWC, UW)

Diploma in Nursing Administration and Community Health Nursing (UPE)

Certificate in Oncochemotherapy (Nursing) (UP)

Diploma in Nursing (General, Midwifery, Psychiatry) (Orange Free State)

Admission: Standard 10 Certificate and proof of enrolment as a student nurse at a training hospital approved by the S.A. Nursing Council.

Duration: Four years of full-time study.

Post-Basic Diplomas in Nursing (Orange Free State)

The following diplomas may be obtained:

- (i) Diploma in Nursing Administration
- (ii) Diploma in Nursing Education
- (iii) Diploma in Community Health Care

Admission to (i) and (ii): A Standard 10 Certificate and proof of registration as a general nurse/general nurse (male) or a psychiatric nurse and two years' appropriate experience or five years in the case of Nursing Administration as the field of specialization.

Duration of (i) and (ii): One academic year of full-time study.

Admission to (iii): Proof of registration as a nurse and an integrated degree or diploma which implies training in General Nursing, Midwifery or Orthopaedics and Psychiatry of the UOFS.

Duration: One semester. The course extends over two semesters for students who hold another degree or diploma which leads to registration as a nurse with the S.A. Nursing Council.

Diploma in Nursing Education (graduate), (Potchefstroom)

Admission: A degree in Nursing which includes a separate course in Anatomy.

Duration: At least one academic year.

University diploma in Nursing Education or

Diploma in Nursing Education

(Natal, North, Port Elizabeth, Pretoria, Rand Afrikaans University, Stellenbosch, Western Cape, Witwatersrand)

Admission:

Natal: Standard 10 Certificate; proof of registration with the S.A. Nursing Council and at least two years' satisfactory nursing experience.

North: Standard 10 Certificate; proof of registration as a general nurse and midwife, or a general nurse and psychiatric nurse, or a general nurse (male) and male psychiatric nurse; and at least 18 months' experience as a registered nurse/male nurse in a hospital or in extra-institutional health services.

Port Elizabeth: Standard 10 Certificate and proof of registration as a nurse/male nurse with the S.A. Nursing Council. A candidate

who wishes to take Midwifery or Psychiatric Nursing as a teaching subject must be registered as a midwife or a psychiatric nurse.

Pretoria: Standard 10 Certificate and proof of registration as a general nurse/male nurse or a psychiatric nurse/male nurse. A candidate who wishes to take Midwifery must be registered as a midwife.

Rand Afrikaans University: Standard 10 Certificate and proof of registration as a nurse/male nurse with the S.A. Nursing Council. A candidate who wishes to take Midwifery or Psychiatric Nursing as a teaching subject must submit proof of basic registration in these subjects.

Stellenbosch: Standard 10 Certificate; a certificate of registration with the S.A. Nursing Council as a general nurse; and two years' experience as a registered nurse, of which one year must be practical nursing experience in the clinical sections of a training hospital for nurses.

Witwatersrand: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption). The candidate must be registered by the S.A. Nursing Council as a general nurse or general nurse (male) or psychiatric nurse and must have been engaged in the practice of nursing for at least eighteen months, of which period one year must have been in an approved training institution for nurses: Provided that a graduate who holds a Bachelor's degree in Nursing will be required to have been engaged in the practice of nursing for at least one year in a training institution.

Western Cape: See p. 166.

Duration: One-and-a-half years of full-time study or two years of full-time study at the Universities of Port Elizabeth and Stellenbosch. The period of study may be shortened by some universities for candidates who hold a Bachelor's degree in Nursing.

Diploma in Nursing Administration (North, Pretoria, Stellenbosch, Western Cape, Witwatersrand)

Admission:

North: Standard 10 Certificate and proof of registration as a general nurse/male nurse or as a psychiatric nurse/psychiatric nurse (male).

Pretoria: As for the Diploma in Nursing Education.

Stellenbosch: Standard 10 Certificate; a certificate of registration as a general nurse; and a certificate of registration as either a midwife or a psychiatric nurse.

Western Cape: Standard 10 Certificate; a certificate of current registration as a general nurse or a psychiatric nurse; and three years' experience as a registered nurse.

Witwatersrand: Matriculation Certificate or a Standard 10 Certificate or a Standard 10 Certificate (Matriculation Exemption). A candidate must be registered as a general nurse or general nurse (male) or psychiatric nurse and must have been engaged in the practice of nursing for at least two years, of which period at least one year must have been in an approved training institution for nurses.

Duration: One year of full-time study.

Diploma in Nursing Administration and Community Health Nursing
(Port Elizabeth)

Admission: Standard 10 Certificate and proof of registration as a general nurse and as a midwife or, in the case of males, as a general nurse and psychiatric or orthopaedic nurse.

Duration: One-and-a-half years of full-time study.

Certificate in Oncochemotherapy (Nursing) (Pretoria)

Admission: Proof of registration as a general nurse/male nurse and the degree of B.Cur. or B.Cur.(I. et A.) or the Dip.Cur. or the Diploma in Nursing Education.

Duration: One semester.

OCCUPATIONAL THERAPY

Universities: Cape Town, Orange Free State, Stellenbosch, Witwatersrand.

Degrees

First degrees

Bachelor of Science in Occupational Therapy: B.Sc. (Occ.Ther.) (UCT)

Bachelor in Occupational Therapy: B.Occupational Therapy (UOFS, US)

Bachelor of Science in Occupational Therapy: B.Sc.(O.T.) (UW)

Master's degree

Master of Science in Occupational Therapy: M.Sc. (O.T.) (UW)

Doctor's degree

Doctor of Philosophy: Ph.D. (UW)

Bachelor of Science in Occupational Therapy: B.Sc. (Occ.Ther.)
or

Bachelor in Occupational Therapy: B.Occupational Therapy or
Bachelor of Science in Occupational Therapy: B.Sc.(O.T.)

(All the above-mentioned universities)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: A pass in Mathematics on the Standard Grade and a medical certificate.

Witwatersrand: As for B.Sc.(Nursing). See p. 191.

Duration: Four years of full-time study.

Diplomas

Teachers' Diploma in Occupational Therapy (UP, US)

Diploma for Therapists (Special Education): D.T.S.E. (Unisa)
See EDUCATION p. 161.

Teachers' Diploma in Occupational Therapy (Pretoria, Stellenbosch)

Admission: A qualification in Occupational Therapy which is registered with the S.A. Medical and Dental Council and at least two years' experience as an occupational therapist in an approved hospital.

Duration: One year of full-time study at Pretoria and two years of full-time study at Stellenbosch.

PHYSIOTHERAPY

Universities: Cape Town, Durban-Westville, Orange Free State, Stellenbosch, Witwatersrand.

Degrees

First degrees

Bachelor of Science in Physiotherapy: B.Sc.(Phys.) (UCT) or B.Sc. in Physiotherapy (US) or B.Sc. (Physiotherapy) (UW)

Baccalaureus Scientiae in Physiotherapy: B.Sc.(Physio.) (UDW, UOFS)

Master's degrees

Master of Science in Physiotherapy: M.Sc. in Physiotherapy (US) or M.Sc. (Physiotherapy) (UW)

Doctor's degree

Doctor of Philosophy: Ph.D. (UW)

Bachelor of Science in Physiotherapy: B.Sc.(Phys.) or B.Sc. in Physiotherapy or B.Sc.(Physiotherapy) or

Baccalaureus Scientiae in Physiotherapy: B.Sc.(Physio.)
(All the above-mentioned universities)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: A pass in Mathematics on the Standard Grade, and a medical certificate.

Durban-Westville: As for the B.Sc. degree. See p. 201.

Orange Free State: A pass in Mathematics on the Standard Grade. Prospective students are advised to offer Physical Science and, if possible, Biology as well for the Std 10 examination.

Stellenbosch: A pass in Mathematics on the Higher or the Standard Grade. Prospective students are advised to take Physical Science and/or Biology and/or Physiology for the Std 10 examination.

Witwatersrand: As for B.Sc.(Nursing). See p. 191.

Duration: Four years of full-time study.

Diplomas and Certificate

Certificate in Teaching Physiotherapy (UCT)

Diploma in Physiotherapy Education (UP, UW)

Diploma in the Teaching of Physiotherapy (UDW) See p. 146.

Diploma for Therapists (Special Education): D.T.S.E. (Unisa)
See EDUCATION p. 161.

Certificate in Teaching Physiotherapy or

Diploma in Physiotherapy Education

(Cape Town, Pretoria, Witwatersrand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption); a qualification in Physiotherapy which is accepted for registration with the S.A. Medical and Dental Council; and at least two years' approved experience in the practice of Physiotherapy.

Duration: Four academic terms of full-time study (Cape Town) or one year of full-time study (Pretoria) or two years of part-time study (Witwatersrand).

RADIOGRAPHY

Universities: Orange Free State, Pretoria

Diplomas

Diploma in Diagnostic Radiography (UOFS)

Diploma in Therapeutic Radiography (UOFS)

Diploma in Radiographic Diagnosis (UP)

Diploma in Radiographic Therapy (UP)

Diploma in Radiation Protection for Sisters (UP)

Diploma in Diagnostic Radiography and

Diploma in Therapeutic Radiography

(Orange Free State)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) or a recognized Standard 10 Certificate with a pass in Mathematics and preferably Physics or Physical Science as well.

Duration: Two years of full-time study for the Diploma in Diagnostic Radiography. The Diploma in Therapeutic Radiography will be awarded after further study of one year after obtaining the Diploma in Diagnostic Radiography.

The courses are offered in co-operation with the National Hospital, Bloemfontein.

Diploma in Radiographic Diagnosis (Pretoria)

Admission: Standard 10 Certificate with a pass in Mathematics and preferably, in addition, Physics or Physical Science.

With a view to selection for the course each candidate must take a preliminary course in nursing at the H.F. Verwoerd Hospital for five weeks before she can be admitted to the diploma course.

Duration: Two years of full-time study.

A candidate who has obtained the Diploma in Radiographic Diagnosis may, after further study of one academic year, obtain the Diploma in Radiographic Therapy.

Diploma in Radiographic Therapy (Pretoria)

Admission: As for the Diploma in Radiographic Diagnosis.

Duration: Two years of full-time study.

A candidate who has obtained the Diploma in Radiographic Therapy may, after further study of one academic year, obtain the Diploma in Radiographic Diagnosis.

Diploma in Radiation Protection for Sisters (Pretoria)

Admission: Standard 10 Certificate and the status of a Sister in a general hospital.

Duration: One year of full-time study.

FACULTY OF MILITARY SCIENCE,

MILITARY SCIENCE.

University: Stellenbosch.

Degrees:

Bachelor of Military Science: B.Mil.

Honours Bachelor of Military Science: Honours B.Mil.

Master of Military Science: M.Mil.

Bachelor of Military Science: B.Mil.

Admission: Students must

- hold a Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption);
- for the B.Mil. field Commerce, have passed Mathematics on the Standard Grade, and for the B.Mil. field Science, Mathematics and Physical Science on the Standard Grade; and
- have been accepted by the military selection board for officer training.

Duration: Three years of full-time study.

The B.Mil. degree can be followed in one of the following fields: Arts; Science; Commercial subjects.

All the courses are followed at the Military Academy at Saldanha. The Military Academy is the seat of the Faculty of Military Science.

FAULTY OF SCIENCE

PURE SCIENCE

DIETETICS

HOME ECONOMICS/DOMESTIC SCIENCE

PHARMACY

PURE SCIENCE

Universities: All the universities in the Republic of South Africa.

Degrees

Bachelor of Science or Baccalaureus Scientiae: B.Sc.

Bachelor of Science (Honours) or Baccalaureus Scientiae Honores: B.Sc.Hons.

Master of Science or Magister Scientiae: M.Sc.

Doctor of Philosophy or Philosophiae Doctor: Ph.D.

Doctor of Science or Doctor Scientiae: D.Sc.

Admission requirements for a first degree in the Faculty of Science: Matriculation Certificate of the Joint Matriculation Board, Pretoria, or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements of the universities:

Cape Town:

- A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade.
- A pass in at least one subject from Group C (Natural Sciences including Physiology) on the Higher Grade or with at least 50 per cent on the Standard Grade.

Durban-Westville: A pass of at least 50 per cent in Mathematics on the Higher Grade and a pass in either Physical Science or Biology on the Higher Grade.

Fort Hare: A pass in Mathematics. A student will not be admitted to Mathematics I unless he has obtained at least 40 per cent in Mathematics in the matriculation or equivalent examination.

Natal: Passes in Mathematics and a natural science subject of 40 per cent on the Higher Grade or 50 per cent on the Standard Grade.

North: Students shall be admitted only if they have a rating of 23 or more on the University of the North Scale which is based on the results of the matriculation examination.

University of the North Scale

The rating of a candidate is compiled as follows:

- 2 x Mathematics mark
- plus $1\frac{1}{2}$ x General Science or Biology mark whichever is the highest
- plus 1 x English mark

The Matric Symbols have the following mark values:

A = 8	C = 6	E = 4	G = 2
B = 7	D = 5	F = 3	H = 1

Orange Free State: A pass in Mathematics on the Higher Grade or at least 40 per cent on the Standard Grade and a pass in Physical Science and/or Biology on the Standard Grade. Physical Science is strongly recommended as a subject for the Std 10 examination. A pass of at least 50 per cent on the Standard Grade is required from students who wish to take Mathematics I.

Port Elizabeth: A pass of at least 40 per cent in Mathematics on the Higher or the Standard Grade.

Potchefstroom: A pass in Mathematics on the Higher Grade, or passes in a natural science subject, preferably Physical Science, and Mathematics on the Standard Grade.

Additional requirements in respect of certain courses:

- Mathematics: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade.
- Dietetics: A pass in Physical Science on at least the Standard Grade.
- Industrial Chemistry: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade and a pass in a natural science subject, preferably Physical Science, on the Standard Grade.
- Physical Education: A student must be medically fit for the course.

Pretoria: Passes in Mathematics and Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade.

Additional requirements in respect of certain courses:

- A candidate will not be admitted to the following courses unless he complies with the above-mentioned requirements: Botany, Biochemistry, Chemistry, Entomology, Genetics, Geology, Metallurgy, Microbiology, Physics, Physiology, Zoology.
- Mathematics, Mathematical Statistics, Applied Mathematics: A candidate will not be admitted to these courses unless he passed Mathematics on the Higher Grade or obtained at least 50 per cent on the Standard Grade.

Rand Afrikaans University: At least 40 per cent in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade.

Additional requirements in respect of certain courses:

- Mathematics, Mathematical Statistics: Candidates who passed Mathematics on the Standard Grade will only be admitted to these courses by way of exception.
- Mathematical Methods: A pass in Mathematics of 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade.

Rhodes: A pass in Mathematics on the Standard Grade.

Additional requirements in respect of certain courses:

- Mathematics, Computing and Applied Mathematics, Physics or Statistics: A candidate must have obtained a pass in Mathematics on the Higher or on the Standard Grade.
- Mathematics, Computer Science, Applied Mathematics or Mathematical Statistics: A candidate intending to major in one of these subjects must have obtained a pass in Mathematics on the Higher Grade or a pass deemed to be equivalent thereto on the Standard Grade.
- Chemistry IA (the major course): A pass in either Chemistry or Physics or Physical Science on the Higher Grade or a pass deemed to be equivalent thereto on the Standard Grade.
- Physics IA (the major course): A pass in either Physics or Physical Science on the Higher Grade or a pass deemed to be equivalent thereto on the Standard Grade.

South Africa: A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade.

Stellenbosch: Passes in Mathematics and Physical Science of which at least one must be on the Higher Grade.

For all courses in which Mathematics I is offered as a subject, a pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade is required.

Western Cape: A pass in Mathematics with a minimum of $33\frac{1}{3}$ per cent.

Witwatersrand:

- A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade, and
- a pass on the Higher Grade in one of the following subjects if Mathematics is passed on the Higher Grade, or in two of the following subjects if Mathematics is offered on the Standard Grade: Biology, French, Geography, German, Hebrew, History, Latin, Physical Science, Physiology, and
- a pass on the Higher or on the Standard Grade in one of the following subjects: Biology, Physical Science, Physiology.

Zululand: A pass of at least 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade in Mathematics or a pass in Mathematics O.

Bachelor of Science or Baccalaureus Scientiae: B.Sc.

Admission: See p.201.

Duration: Three years of full-time study of four years of part-time study.

Curriculum: Nine courses with two major subjects.

First degrees and post-graduate degrees in specialized fields

Durban-Westville

Baccalaureus Scientiae in Industrial Chemistry: B.Sc.(Ind. Chem.) - Four years of full-time study

Natal

Bachelor of Science in Chemical Technology: B.Sc.Chem.Tech. - A one-year post-graduate course

Master of Science in Chemical Technology: M.Sc.Chem.Tech.

North

Degree in Optometry - The rules and syllabuses are to be determined.

Orange Free State

Magister Scientiae in Clinical Psychology

Magister Scientiae in Counselling Psychology

Port Elizabeth

Baccalaureus Scientiae Materialium Technicarum (Materials Science) - Four years of full-time study

M.Sc. in Textile Science

Philosophiae Doctor in Textile Science: Ph.D. in Textile Science

Potchefstroom

Bachelor of Science (Pedology) - A one-year post-graduate course

Bachelor of Science Honours (Pedology)

Pretoria

Bachelor of Science in Mining Geology - Four years of full-time study

Bachelor of Science in Meteorology - Four years of full-time study

Bachelor of Science (Honours) in Nature Conservation

Master of Science in Nature Conservation

Doctor of Science in Nature Conservation

Bachelor of Science (Honours) in Biophysics

Master of Science in Biophysics

Doctor of Science in Biophysics

Rhodes

Honours degree in Operations Research

South Africa

Honours Bachelor of Science (Operations Research): Hons.B.Sc. (Operations Research)

Master of Science (Operations Research): M.Sc.(Operations Research)

Stellenbosch

Honours Bachelor of Science with Biophysics as major field of study

Honours Bachelor of Science with Operations Analysis as major field of study

Master of Science (Counselling Psychology)

Master of Science (Clinical Psychology)

Witwatersrand

Bachelor of Science and Arts: B.Sc. & A.

- Four years of full-time study. A candidate must satisfy the admission requirements of both the Faculty of Arts (p. 92) and the Faculty of Science (p.203)

Bachelor of Science in Industrial Chemistry: B.Sc.(Ind.Chem.)

- Four years of full-time study.

See FACULTY OF EDUCATION for degree and diploma courses for teacher training in the field of Science.

Certificates and Diplomas

Certificate in Exploration Geochemistry (UCT)

Diploma in Applied Chemistry (UFH)

Post-graduate Diploma in Geohydrology (UOFS)

Diploma in Pedology (PU for CHE)

Certificate in Pedology (PU for CHE)

Diploma in Leather Science (RU)

Diploma in Computer Science (UW)

Certificate in Exploration Geochemistry (Cape Town)

Admission: B.Sc. degree with qualifications in Geology and Chemistry of a sufficiently high standard.

Duration: Second university term.

Diploma in Applied Chemistry: D.A.C. (Fort Hare)

Admission: A Bachelor's degree with Chemistry as a major subject.

Duration: One year of full-time study.

Post-graduate Diploma in Geohydrology (Orange Free State)

Admission: A B.Sc.(Eng.) or a B.Sc. degree with Geology and Chemistry.

Duration: One year of full-time study.

Diploma in Pedology (Potchefstroom)

Admission: A Standard 10 Certificate with Mathematics and Chemistry/Physics, the latter on Std 8 level at least

or

a Standard 10 Certificate (Matriculation Exemption) with Mathematics and Chemistry/Physics, the latter on Std 8 level at least.

Duration: Three years.

Certificate in Pedology (Potchefstroom)

Admission: National Diploma for Technicians (Agriculture) or an equivalent qualification.

Duration: One year.

Diploma in Leather Science (Post-graduate) (Rhodes)

Admission: B.Sc. degree with Chemistry as a major subject.

Duration: One year of full-time study.

Diploma in Computer Science (Witwatersrand)

Admission: A Bachelor's degree in any faculty and a standard in Mathematics equivalent to that of the second year level for a degree.

Duration: Two years of part-time study.

DIETETICS

Universities: Cape Town, Natal, Orange Free State, Potchefstroom, Pretoria, Stellenbosch.

Degrees

First degrees

Bachelor of Science in Dietetics: B.Sc.Diet. (UN)

Bachelor of Science with Dietetics and Physiology as major subjects: B.Sc. (PU for CHE, US)

Bachelor of Dietetics: B.Sc. (Dietetics) (UP)

Honours degrees

Bachelor of Science in Dietetics (Honours): B.Sc.Diet.Hons. (UN)

Honours Bachelor of Science: Honns.B.Sc. (PU for CHE)

Bachelor of Dietetics Honours: B.Sc.(Dietetics) Hons. (UP)

Honours B.Sc. (US)

Master's degrees

Master of Science in Dietetics: M.Sc.Diet. (UN)

Master of Science: M.Sc. (PU for CHE, US)

Master of Dietetics: M.Sc.(Dietetics) (UP)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UN, US)

Doctor Scientiae: D.Sc. (PU for CHE, US)

Bachelor of Science in Dietetics: B.Sc.Diet. or

Bachelor of Science with Dietetics and Physiology as major subjects: B.Sc. or

Bachelor of Dietetics: B.Sc.(Dietetics),

(Natal, Potchefstroom, Pretoria, Stellenbosch).

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Natal: As for the B.Sc. degree.

Potchefstroom: Passes in Mathematics and a natural science subject, preferably Physical Science, on the Standard Grade at least.

Pretoria: As for the B.Sc. degree.

Stellenbosch: Pass marks in Mathematics and Physical Science with at least one on the Higher Grade.

Duration: Three years of full-time study.

Diplomas

Diploma in Therapeutic Dietetics (UCT)

Diploma in Hospital Dietetics (UOFS, PU for CHE, US)

University Diploma in Dietetics (PU for CHE)

Post-graduate Diploma in Hospital Dietetics (UP)

Diploma in Therapeutic Dietetics, (Cape Town)

Admission: B.Sc. with Physiology, Microbiology, Chemistry or other approved major subject or a degree in Home Economics or Dietetics.

Duration: One-and-a-half years of full-time study.

Diploma in Hospital Dietetics or

Post-graduate Diploma in Hospital Dietetics (Orange Free State, Potchefstroom, Pretoria, Stellenbosch)

Admission: B.Sc. with Dietetics and Physiology as major subjects or B.Sc.(Dietetics) or B.Sc. in Home Economics (Dietetic field).

Duration: The Diploma will be awarded to those students who have satisfactorily completed 12 months' service and instruction in an approved hospital and have passed an examination.

University Diploma in Dietetics (Potchefstroom)

Admission: B.Sc. with Dietetics and Physiology as major subjects or the degree of B.Sc.(Dietetics).

Duration: One year of full-time study.

HOME ECONOMICS/DOMESTIC SCIENCE

Universities: Cape Town, Durban-Westville, Natal, Orange Free State, Potchefstroom, Pretoria, Stellenbosch.

Degrees

First degrees

Baccalaureus Paedagogiae in Home Economics: B.Paed.(Home Ec.) (UDW)

Bachelor of Science in Home Economics: B.Sc.Home Econ. (UN) or B.Sc.Home Economics (UOFS)

Bachelor of Science in Home Economics (Education): B.Sc.Home Economics(Ed.) (UOFS)

Bachelor of Science (Domestic Science): B.Sc.(Dom.Sc.) (PU for CHE)

Bachelor of Science (Domestic Science)(Education): B.Sc.(Dom.Sc. Ed.) (PU for CHE)

Bachelor of Domestic Science: B.Sc. (Dom.Sc.) (UP)

Bachelor of Science in Domestic Science (Education): B.Sc.(Dom. Sc.)(Ed.) (UP)

B.Sc. in Home Economics (Ed.) (US)

B. in Home Economics (US)

B. in Home Economics (Ed.) (US)

Honours degrees

Bachelor of Science in Home Economics (Honours): B.Sc.Home Econ. Hons. (UN)

Honours Bachelor of Science: Hons.B.Sc. (PU for CHE)

Honours Bachelor of Domestic Science: B.Sc.(Dom.Sc.)(Hons.) (UP)

Hons. B.Sc. in Home Economics (US)

Hons. B. in Home Economics (US)

Master's degrees

Master of Science in Home Economics: M.Sc.Home Econ. (UN)

Master of Science: M.Sc. (PU for CHE)

Master of Domestic Science: M.Sc.(Dom.Sc.) (UP)

M.Sc. in Home Economics (US)

M. in Home Economics (US)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UN)

Doctor of Science: D.Sc. (PU for CHE)

Doctor of Philosophy (Home Economics): Ph.D.(Home Economics) (US)

Doctor of Science in Home Economics: D.Sc. in Home Economics (US)

Baccalaureus Paedagogiae in Home Economics: B.Paed.(Home Ec.) or

Bachelor of Science in Home Economics (Education): B.Sc.Home Economics (Ed.) or

Bachelor of Science (Domestic Science)(Education): B.Sc. (Dom.Sc.Ed.) or

Bachelor of Science in Domestic Science (Education): B.Sc.(Dom. Sc.)(Ed.) or

B. in Home Economics (Ed.)

(Durban-Westville, Orange Free State, Potchefstroom, Pretoria, Stellenbosch)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Durban-Westville: A pass in Mathematics or a science subject on the Higher or the Standard Grade.

Orange Free State: As for the B.Sc. degree.

Potchefstroom: As for the B.Sc. degree. Students must have passed Physical Science on at least the Standard Grade.

Pretoria: As for the B.Sc. degree.

Stellenbosch: A pass in Mathematics or Physical Science on the Standard Grade.

Duration: Four years of full-time study.

B.Sc. in Home Economics (Ed.) (Stellenbosch)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with passes in Mathematics and Physical Science, of which at least one must be on the Higher Grade.

Duration: Four years of full-time study.

Bachelor of Science in Home Economics: B.Sc. Home Econ. or B.Sc. Home Economics or

Bachelor of Science (Domestic Science): B.Sc.Dom.Sc. or

Bachelor of Domestic Science: B.Sc.(Dom.Sc.), or

B. in Home Economics

(Natal, Orange Free State, Potchefstroom, Pretoria, Stellenbosch)

Admission: As for the aforementioned degrees of the universities concerned.

Natal: As for the B.Sc. degree.

Stellenbosch: Passes in Mathematics and a natural science subject on the Standard Grade.

Duration: Four years of full-time study. Three years of full-time study at the University of Natal.

Diplomas

Higher Teacher's Diploma in Home Economics (UCT) See FACULTY OF EDUCATION p. 143.

Post-graduate Extension Diploma in Home Economics (US)

The following universities offer a four-year teacher's diploma course with Home Economics as one of the specializations: Natal, Orange Free State, Potchefstroom, Pretoria, Stellenbosch, Witwatersrand. See FACULTY OF EDUCATION.

Post-graduate Extension Diploma in Home Economics (Stellenbosch)

Admission: B.Sc. in Home Economics or B.Sc. with Dietetics and Physiology as major subjects.

Duration: One year of full-time study.

PHARMACY

Universities: Durban-Westville, North, Potchefstroom, Rhodes, Western Cape.

Degrees

First degrees

Bachelor of Pharmacy: B.Pharm. (UDW, UNorth, RU)

Bachelor of Science (Pharmacy): B.Sc.(Pharm.) (PU for CHE)

Baccalaureus Pharmacy: B.Pharm. (UWC)

Honours degrees

Honours Bachelor of Science (Pharmacy): Honns.B.Sc.(Pharm.) (PU for CHE) or Hons.-B.Sc.(Pharm.) (UNorth)

Bachelor of Science with Honours: B.Sc.(Hons.) (RU)

Master's degrees

Master of Pharmacy: M.Pharm. (UDW, UNorth)

Master of Science (Pharmacy): M.Sc.(Pharm.) (PU for CHE)

Master of Science: M.Sc. (RU)

Magister Pharmacy: M.Pharm. (UWC)

Doctor's degrees

Doctor of Pharmacy: D.Pharm. (UDW, UNorth)

Doctor of Science (Pharmacy): D.Sc.(Pharm.) (PU for CHE)

Doctor of Science: D.Sc. (RU)

Doctor Pharmacy: D.Pharm. (UWC)

Bachelor of Pharmacy: B.Pharm., or

Bachelor of Science (Pharmacy): B.Sc.(Pharm.), or

Baccalaureus Pharmacy: B.Pharm.

(All the above-mentioned universities.)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Additional requirements:

Durban-Westville: As for the B.Sc. degree.

North: As for the B.Sc. degree.

Potchefstroom: Passes in Mathematics and a natural science subject, preferably Physical Science, on the Standard Grade at least.

Rhodes: A pass in Mathematics on the Standard Grade and at least in one of the following subjects: Biology, Botany, Chemistry, Physical Science, Physics, Physiology or Zoology.

Western Cape: As for the B.Sc. degree.

Duration: Four years of full-time study plus one year of practical training (apprenticeship).

Diploma

University Diploma in Pharmacology (Potchefstroom)

Admission: B.Sc.(Pharm.) degree or the degree of M.B., Ch.B. or an equivalent qualification.

Duration: One year of full-time or part-time study.

FACTULTY OF SOCIAL SCIENCE

Only four universities have a Faculty of Social Science. At the other universities these degrees and diplomas are offered in the Faculty of Arts.

SOCIAL SCIENCE

SOCIAL WORK

SOCIAL SCIENCE/SOCIAL WORK

Universities: All the universities in the Republic of South Africa.

Degrees

First degrees

Bachelor of Social Science: B.Soc.Sc. (UCT, UN, RU)

Bachelor of Social Science in Social Work: B.Soc.Sc.(S.W.) (UCT)

Baccalaureus Artium in Social Work: B.A.(S.W.) (UDW, UPE) or B.A.(S/W) (UWC)

Bachelor of Arts in Social Work: B.A.(S.W.) (UFH, UNorth, UP, RAU, UZ) or B.A. (Social Work) (UW)

Baccalaureus Societatis Scientiae: B.Soc.Sc. (UOFS)

Baccalaureus Societatis Scientiae in Social Work: B.Soc.Sc.(S.W.) (UOFS)

Baccalaureus Artium (Social Work): B.A.(S.W.) (PU for CHE)

Bachelor of Social Science (Social Work): B.Soc.Sc.(Soc.Work) (RU)

Bachelor of Arts in Social Science: B.A.(S.S.) (Unisa)

B.A. in Social Work (US)

Honours degrees

Bachelor of Social Science (Honours): B.Soc.Sc.(Hons.) (UCT) or B.Soc.Sc.Hons. (UN)

Bachelor of Social Science with Honours: B.Soc.Sc.(Hons.) (RU)

Bachelor of Social Science in Social Work (Honours): B.Soc.Sc. (S.W.)(Hons.) (UCT)

Honoris Baccalaureus Artium in Social Work: B.A.(S.W.) Hons. (UDW)

Bachelor of Arts in Social Work (Honours): B.A.(Hons.)(S.W.) (UFH) or B.A.(S.W.)(Hons.) (UP)

Bachelor of Arts Honours in Social Work: Hons.B.A.(S.W.) (UNorth, UZ)

Honneurs-Baccalaureus Societatis Scientiae: B.Soc.Sc.(Hons.) (UOFS)

Honneurs-Baccalaureus Societatis Scientiae in Social Work:
B.Soc.Sc.(Hons.)(S.W.) (UOFS)

Baccalaureus Artium Honores: B.A. Hons. (UPE)

Honneurs Baccalaureus Artium: Honns.B.A. (PU for CHE)

Honours Bachelor of Arts in Social Science: Hons.B.A.(S.S.)
(Unisa)

Honours B.A. in Social Work (US)

Honours B.A. in Social Work (Medical Social Work field) (US)

Honours Baccalaureus Artium in Social Work: B.A.Hons.(S/W)
(UWC)

Master's degrees

Master of Social Science: M.Soc.Sc. (UCT, UN, RU)

Master of Public Administration: M.Pub.Ad. (UCT)

Magister Artium in Social Work: M.A.(S.W.) (UDW) or M.A.(S/W)
(UWC)

Master of Arts in Social Work: M.A.(S.W.) (UFH, UNorth, UP,
RAU, UZ) or M.A. (Social Work) (UW)

Magister Societatis Scientiae: M.Soc.Sc. (UOFS)

Magister Societatis Scientiae in Social Work: M.Soc.Sc.(S.W.)
(UOFS)

Magister Societatis Scientiae (Clinical Psychology): M.Soc.Sc.
(Clinical Psychology) (UOFS)

Magister Artium: M.A. (UPE, PU for CHE)

Master of Arts in Social Science: M.A.(S.S.) (Unisa)

M.A. in Social Work (US)

M.A. in Social Work (Medical Social Work field) (US)

Doctor's degrees

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW)

Doctor of Social Science: D.Soc.Sc. (UCT, UN, RU)

Doctor Philosophiae: D.Phil. (UDW, UPE, PU for CHE, US, UWC)

Doctor of Philosophy: D.Phil. (UFH, UNorth, UP, Unisa, UZ)

Doctor Societatis Scientiae: D.Soc.Sc. (UOFS)

Doctor Societatis Scientiae in Social Work: D.Soc.Sc.(S.W.)
(UOFS)

Doctor of Literature and Philosophy: D.Litt. et Phil. (RAU)

SOCIAL SCIENCE

Bachelor of Social Science: B.Soc.Sc. or

Baccalaureus Societatis Scientiae: B.Soc.Sc.

(Cape Town, Natal, Orange Free State, Rhodes)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Three years of full-time study.

At the University of Natal students who wish to qualify as social workers major in Social Work and either Psychology or Sociology.

SOCIAL WORK

Bachelor of Social Science in Social Work: B.Soc.Sc.(S.W.) or

Bachelor of Arts in Social Work: B.A.(S.W.) or

Baccalaureus Societatis Scientiae in Social Work: B.Soc.Sc.(S.W.)
or

Bachelor of Social Science (Social Work): B.Soc.Sc.(Soc.Work)
or

Bachelor of Arts in Social Science: B.A.(S.S.) or

B.A. in Social Work or

Baccalaureus Artium in Social Work: B.A.(S/W)

(Cape Town, Fort Hare, North, Orange Free State, Rhodes, South Africa, Stellenbosch, Western Cape, Zululand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Three years of full-time study.

Baccalaureus Artium in Social Work: B.A.(S.W.) or

Baccalaureus Artium (Social Work): B.A.(S.W.) or

Bachelor of Arts in Social Work: B.A.(S.W.) or B.A.(Social Work)

(Durban-Westville, Port Elizabeth, Potchefstroom, Pretoria, Rand Afrikaans, Witwatersrand)

Admission: Matriculation Certificate or Standard 10 Certificate (Matriculation Exemption). As for the B.A. degree.

Duration: Four years of full-time study.

Diplomas

Diploma in Social Science (Social Work): Dip Soc.Sc.(S.W.) (UCT)

University Diploma in Social Work: Dip.Soc.Work (UFH)

Diploma in Social Work (UNorth, UOFS, PU for CHE, RU, UWC, UZ)

Advanced Diploma in Psychiatric Social Work (UCT)

Postgraduate Diploma in Social Work (UN)

Advanced Diploma in Social Work (UOFS)

Diploma in Social Studies (RU)

Higher Diploma in Social Work (UWC) (New course)

Higher Diploma in Community Organization (UZ)

Diploma in Social Science (Social Work): Dip.Soc.Sc. or

Diploma in Social Work

(Cape Town, North, Orange Free State, Potchefstroom, Rhodes, Western Cape, Zululand)

Admission: Standard 10 Certificate.

Duration: Three years of full-time study. Four years at Potchefstroom.

The curriculum is the same as that laid down for the degree of B.Soc.Sc.(S.W.) or B.A.(S.W.) according to the university offering the Diploma course.

University Diploma in Social Work: Dip.Soc. Work (Fort Hare)

Admission: Standard 10 Certificate; or at least 25 years of age and a standard of education equivalent to that required for Std 10.

Duration: Three years of full-time study.

The curriculum is the same as that for the degree of B.A.(S.W.)

Advanced Diploma in Psychiatric Social Work, (Cape Town)

Admission: An Honours degree in Psychiatric Social Work or its recognized equivalent.

Duration: A half-year of prescribed field and clinical practice.

Postgraduate Diploma in Social Work (Natal)

Admission: A Bachelor's degree in Social Work.

Duration: One year of full-time study or two years of part-time study.

Advanced Diploma in Social Work, (Orange Free State)

Admission: A recognized university Diploma in Social Work.

Duration: One year of full-time study.

Diploma in Social Studies (Rhodes)

Admission: Standard 10 Certificate.

Duration: Two years of full-time study.

This Diploma offers only general training in Social Work.

Higher Diploma in Community Organization, (Zululand)

Admission: The degree of B.A.(S.W.) or the Diploma in Social Work.

Duration: One year.

FACTULTY OF THEOLOGY

THEOLOGY

Universities: Durban-Westville, Fort Hare, Natal, North, Potchefstroom, Pretoria, Rhodes, South Africa, Stellenbosch, Western Cape, Zululand.

The Universities of the Orange Free State and Port Elizabeth and the Rand Afrikaans University also offer curricula for the

B.A. Admission degree.

Degrees

Durban-Westville

Baccalaureus Theologiae:
B.Theol.
Baccalaureus Divinitatis: B.D.
Magister Divinitatis: M.D.
Doctor Divinitatis: D.D.

Natal

Bachelor of Arts: B.A.
Bachelor of Arts (Honours):
B.A.Hons.

Potchefstroom

Theologiae Baccalaureus: Th.B.
Theologiae Magister: Th.M.
Theologiae Doctor: Th.D.

Rhodes

Bachelor of Theology: Th.B.
Bachelor of Divinity: B.D.
Doctor of Philosophy: Ph.D.
Doctor of Divinity: D.D.

Stellenbosch

Bachelor of Theology: B.Th.
Master of Theology: M.Th.
Doctor of Theology: D.Th.

Zululand

Bachelor of Theology: B.Theol.

Fort Hare

Bachelor of Theology: B.Theol.
Bachelor of Theology (Honours):
B.Theol.(Hons.)
Master of Theology: M.Theol.
Doctor of Theology: D.Theol.

North

Bachelor of Theology: B.Theol.
Bachelor of Divinity: B.D.
Master of Divinity: M.Div.
Doctor of Divinity: D.D.

Pretoria

Bachelor of Divinity: B.D.
Doctor of Divinity: D.D.

South Africa

Bachelor of Theology: B.Th.
Honours Bachelor of Theology:
Hons.B.Th.
Bachelor of Divinity: B.D.
Master of Theology: M.Th.
Doctor of Theology: D.Th.

Western Cape

Baccalaureus Theologiae: B.Th.
Magister Theologiae: M.Th.
Doctor Theologiae: D.Th.

Bachelor of Divinity: B.D.

Doctor of Divinity: D.D.

Baccalaureus Theologiae: B.Theol. or

Bachelor of Theology: B.Theol. or Th.B. or B.Th.

(Durban-Westville, Fort Hare, North, Rhodes, South Africa,
Zululand)

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption).

Duration: Three or four years of full-time study.

Bachelor of Arts: B.A. (Natal)

The University of Natal offers both Biblical Studies and Theology as major subjects in which two qualifying courses may be taken.

A candidate who has completed the two courses in either of these two subjects for his B.A. degree may take an Honours course in Divinity.

Post-graduate degrees

Baccalaureus Divinitatis: B.D. or

Bachelor of Divinity: B.D.

(Durban-Westville, North, South Africa, Zululand)

Admission: A B.A. degree with certain prescribed courses, inter alia Greek, Hebrew, Latin and/or German; or a B.Theol. degree (North and Zululand).

Duration: Three years of full-time study.

Theologiae Baccalaureus: Th.B. (Potchefstroom)

Admission: B.A. degree with courses in Hebrew, Greek, Latin, Philosophy.

A student must give proof of a satisfactory reading knowledge of German.

Duration: Four years of full-time study.

Bachelor of Divinity: B.D. (Pretoria)

Admission:

- Division A - Dutch Reformed Church of Africa (Ned.Hervormde Kerk van Afrika) requires a Bachelor's degree with courses in Latin, Biblical Studies, Greek, Hebrew and Philosophy.
- Division B - Dutch Reformed Church (Nederduits Gereformeerde Kerk) requires a Bachelor's degree with courses in Biblical Studies, Special Latin or Special German, Greek and Hebrew.

Duration: Three years of full-time study.

Bachelor of Divinity: B.D. (Rhodes)

Admission: The Th.B. degree or a Bachelor's degree in another faculty, preferably a B.A. degree including certain prescribed subjects.

Duration: Two years of full-time study after the B.Th. or above-mentioned B.A. degree, otherwise three years.

Bachelor of Theology: B.Th. (Stellenbosch)

Admission: A Bachelor's degree with courses in Biblical Studies, Hebrew and Greek.

Duration: Three years of full-time study.

Baccalaureus Theologiae: B.Th. (Western Cape)

Admission: A student must have completed the Admission course successfully. The Admission course is a two-year course for students who have obtained a Matriculation Certificate or a Std 10 Certificate (Matriculation Exemption).

Duration: Three years of full-time study.

Certificates and Diplomas

Certificate in Theology (UDW)

Certificate in Religious Knowledge (RU)

Diploma in Biblical Studies (PU for CHE)

Diploma in Theology (UFH, UNorth, UWC, UZ)

Diploma in Theology: Dip.Theol. (RU)

Lower Diploma in Theology (Unisa)

Licentiate in Theology (US)

Post-graduate Diploma in Theology (UP)

Certificate in Theology (Durban-Westville)

Admission: As determined by the Senate after consultation with the respective denominations.

Duration: Three years of full-time study.

Certificate in Religious Knowledge (Rhodes)

Admission: Mature non-matriculants.

Duration: Two years of full-time study.

Diploma in Biblical Studies (Potchefstroom)

Admission: A degree and/or a recognized teacher's diploma.

Duration: Two years of part-time study.

Diploma in Theology (Fort Hare, Rhodes, Zululand)

Admission: Standard 10 Certificate; some universities admit mature non-matriculants.

Duration: Three years of full-time study.

Diploma in Theology (Western Cape)

Admission: Standard 10 Certificate plus two-year Admission course.

Duration: Three years of full-time study. The curriculum is the same as for the B.Th. degree at the University of the Western Cape.

Lower Diploma in Theology (South Africa)

Admission: Standard 10 Certificate or equivalent.

Duration: Two years.

Licentiate in Theology (Stellenbosch)

Students who have obtained the B.Th. degree may be admitted to the fourth year course to obtain the Licentiate in Theology.

Post-graduate Diploma in Theology (Pretoria)

Admission: A post-graduate Bachelor's degree in Theology (B.D.)

Duration: One year of full-time study.

Diploma in Theology: Dipl. Theol. (North)

Admission: The B.Theol. degree.

Duration: Three years of full-time study.

The curriculum is the same as for the B.D. degree, with the exception of the script (essay).

FACULTY OF VETERINARY SCIENCE

VETERINARY SCIENCE

University: Pretoria.

Degrees

Bachelor of Veterinary Science: B.V.Sc.

Master of Veterinary Medicine: M.Med.Vet.

Doctor of Veterinary Science: D.V.Sc.

Bachelor of Veterinary Science: B.V.Sc.

Admission: Matriculation Certificate or a Standard 10 Certificate (Matriculation Exemption) with passes in Mathematics and Physical Science.

Duration: Five-and-a-half years of full-time study.

Diplomas

Diploma in Veterinary Public Health

Diploma in Veterinary Medicine: Dip.Med.Vet.

Diploma in Veterinary Public Health

Admission: B.V.Sc. degree or an equivalent degree. A candidate must be registered with the South African Veterinary Board as a Veterinary Surgeon.

Duration: One year of full-time study or two years of part-time study.

Diploma in Veterinary Medicine: Dip. Med. Vet.

Admission: B.V.Sc. degree or an equivalent degree.

Duration: One year of full-time study or two years of part-time study.

CHAPTER 6

RESEARCH INSTITUTES AND UNITS ATTACHED TO THE UNIVERSITIES

UNIVERSITY OF CAPE TOWN

CENTRE FOR INTERGROUP STUDIES (Established by the Abe Bailey Trust)

The Centre for Intergroup Studies was established in premises at the University of Cape Town on 1 April 1968. Although it is not a formal part of the University of Cape Town, the Centre works in close co-operation with the University.

The primary purpose of this Centre is to promote and conduct research into the broad field of race and language group relations. It also aims at the co-ordination of research in the Western Cape by arranging regular research seminars in which students, teachers and members of the community participate. In order to include participants from outside the Western Cape, research workshops are held annually.

CENTRAL ACOUSTICS LABORATORY

The Central Acoustics Laboratory was established in 1972 as an interfaculty laboratory to cater for the research requirements in acoustics for staff and post-graduate students in the Faculties of Arts, Fine Art and Architecture, Engineering, Medicine, Music and Science.

Assistance with research projects involving acoustics will be provided on request. Present projects include, inter alia, real time speech analysis; application of ultrasonic power to industrial processes and a communication system for the deaf.

CHAMBER OF MINES PRECAMBRIAN RESEARCH UNIT

The Chamber of Mines Precambrian Research Unit was established in 1963 within the Department of Geology for the purpose of conducting and co-ordinating research work on the many problems presented by the Precambrian rocks of South West Africa, Namaqualand, Bushmanland and the Western Cape Province. Financial provision is made for the payment of special bursaries to approved research students working under the supervision of the Director. Close liaison is maintained with the related activities in other

universities and research institutes, the Geological Survey and mining companies.

ENERGY UTILIZATION UNIT

This inter-faculty Unit has been formed to co-ordinate work on various aspects of energy production and utilization in South Africa. The areas covered include the energy growth pattern, roles of different forms of energy, pollution effects of energy usage and the effect of technological developments on energy production and usage.

FISHING INDUSTRY RESEARCH INSTITUTE

The Institute, established in 1946, serves the fishing industry in South Africa and South West Africa. It is financed from its members in the industry and the CSIR. The Institute has been affiliated to the University of Cape Town since 1950 and is housed on the campus. Facilities include laboratories equipped for a wide variety of chemical, physical, microbiological and engineering research and technical investigations.

The functions of the Institute are to conduct research into the preservation, processing, packing and transport of fish and fish by-products; to initiate and provide special routine sampling and inspection services for the industry; to provide scientific and technical services for industry; and, through its library and information services, to keep industry informed of modern developments in fish technology throughout the world.

The research programme covers canning, chilling, salting, smoking and drying of fish; production of fish meal, oil and fish flour, stickwater and other by-products; odour abatement and restriction of harbour pollution. Research on the nutritional value of sea foods and the effects thereon of processing and preservation receive special attention.

INSTITUTE OF CHILD HEALTH

The diversity of specialities involved in the different aspects of child health and the fact that facilities for teaching and research in this field are scattered between the Medical School and five teaching hospitals has caused the Senate and the Council of the University of Cape Town to establish, in collaboration with the Provincial Administration of the Cape of Good Hope, an Institute of Child Health which will bring all activities in regard to the care of children, that is, diagnosis, special investigations, treatment, record keeping, data processing,

direct patient research, teaching, Child Care Information Service and medical and social rehabilitation under one umbrella and in doing so implement the accepted concept of total child care. A Child Care Information Service will be incorporated in the Institute as a reference point for information about all the service facilities currently available.

The building, situated at the Red Cross War Memorial Children's Hospital, Rondebosch, Cape, was completed in 1974.

INSTITUTE OF OCEANOGRAPHY

The Institute was established in 1963 to co-ordinate marine-orientated research activities at the University of Cape Town. At present these activities cover the fields of biology, chemistry, engineering, geology, mathematics, oceanography and physics. Through its Board, the Institute administers application for research funds and equipment needs, as well as supervising the work programme of the University research vessel Thomas B. Davie. The library and workshop are housed in the Department of Oceanography.

MARINE GEOSCIENCE GROUP

The Group comprises the Professor of Marine Geoscience and post-doctoral and post-graduate research workers in the fields of marine geology, geophysics and geochemistry.

Funds for the Group's research activities are provided by the Geological Survey (joint UCT/GS Marine Geoscience Unit), SANCOR and the University. Research programmes cover the following topics related to areas around southern Africa: shallow-water and continental shelf sedimentation, the structure and history of continental margins and ocean basins, and a joint programme of work with the Department of Oceanography on deep ocean currents and sediment dispersion patterns and processes.

PERCY FITZPATRICK INSTITUTE OF AFRICAN ORNITHOLOGY

During 1960 the University entered into an agreement with the Percy Fitzpatrick Institute of African Ornithology whereby the Institute became affiliated with the University. The Institute, which promotes studies in African Ornithology, now offers specialized advanced teaching of Ornithology in the University.

In addition to its own library, the Institute houses the library of the South African Ornithological Society, with an extensive range of periodicals dealing with ornithological and general

zoology. This library is available for use by staff and students of the University.

S.A. MINING INDUSTRY RESEARCH CENTRE FOR HEART DISEASE AND ORGAN TRANSPLANTATION

During 1968 the University received a gift of R1 000 000 from the South African Mining Finance Houses for the purpose of establishing a Research Centre for the investigation of heart disease and organ transplantation. This new Research Centre was completed at the beginning of 1974 and provides facilities for all workers at the Medical School with an interest in cardiac disease or tissue transplantation.

Research in the Centre is concerned mainly with the development of new surgical techniques, the investigation of cardiac disease and with various aspects of immunology.

SOUTHERN UNIVERSITIES NUCLEAR INSTITUTE

The Southern Universities Nuclear Institute was established in 1961 as a joint effort of the Universities of Cape Town and Stellenbosch. As distinct from a university faculty the Institute functions as a separate body, with a legal personality, under the sole control of a Board of Governors consisting of representatives of the two universities, the Atomic Energy Board, the Council for Scientific and Industrial Research, the Cape Provincial Administration and organized Commerce and Industry in the Cape Province.

The two universities are undertaking a programme of advanced training and research for students in the fields of nuclear physics, nuclear engineering, applied radio-activity, radio-biology, radio-chemistry and related fields in agriculture and medicine.

The Institute is at Faure, midway between Cape Town and Stellenbosch on a site of over 300 acres of land.

UCT CHROMATIN RESEARCH UNIT

The Chromatin Research Unit attached to the Biochemistry Department investigates the structure and function of components of the chromatin from eucaryotic cells.

Of particular interest are the basic proteins, the histones, and membrane proteins of the nucleus. The primary structure of a number of histones has been elucidated.

The Unit employs full-time research assistants. Post-graduate students of the Department of Biochemistry undertake research work in the Unit towards their M.Sc. or Ph.D. degrees.

RESEARCH UNITS SUPPORTED BY THE COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)

CARBOHYDRATE CHEMISTRY RESEARCH UNIT

The Unit is attached to the Department of Organic Chemistry. The Head of the Unit is the Professor of Organic Chemistry.

GEOCHEMISTRY RESEARCH UNIT

The Unit is attached to the Department of Geochemistry. The Director of the Unit is the Professor of the Department of Geochemistry.

OCEANOGRAPHIC RESEARCH UNIT

The Unit which undertakes physical oceanography studies, was established in 1960. Several projects are under way, such as the study of wave generation and measurements of current and thermal structure. Tidal analyses and predictions using electronic computer methods are carried out.

RESEARCH UNITS AND GROUPS SUPPORTED BY THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (MRC)

ENDOCRINE/DIABETES RESEARCH GROUP

This group was established in 1955 for the purpose of conducting research into endocrine disorders and disturbances of calcium metabolism and other metabolic derangements, with particular reference to problems unique to or particularly prominent in South Africa, such as diabetes in different racial groups, malnutrition, osteoporosis amongst the Bantu and kidney stones.

LIVER RESEARCH GROUP

This Group was established in 1973 for the purpose of an in-depth study of medical and surgical diseases of the liver.

PORPHYRIA AND RENAL METABOLIC RESEARCH GROUP

The Group was established in 1953 for the purpose of studying porphyric and renal metabolic disorders with special reference to the investigation of two of the human porphyrias, variegate

porphyria and symptomatic porphyria.

PROTEIN RESEARCH UNIT

The Unit was established in 1962 for the purpose of studying factors which may influence or control the metabolism of proteins, either from the point of view of amino acid structure, turnover rate or biochemical behaviour.

VIRUS RESEARCH UNIT

The Unit was established in 1950 for the purpose of studying animal, plant, bacterial and insect viruses and related macromolecular substances.

UNIVERSITY OF DURBAN-WESTVILLE

INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH

The Institute, which was established in 1972, is concerned with research in the social sciences and humanities.

Research projects in progress include, inter alia, the following:

- Employment opportunities for university trained Indians
- The potential Indian labour force of the Pietermaritzburg-Durban region
- Indian land ownership in the rural areas of Natal
- Demographic structure of the Indian population - A pilot survey.

UNIVERSITY OF FORT HARE

XHOSA DICTIONARY PROJECT

In 1966, the Rector of the University College of Fort Hare decided that the compilation of a new Xhosa Dictionary should be undertaken at Fort Hare and that the definitions should be given in both English and Afrikaans, a project since then extended to include definitions in Xhosa as well, thus making it a fully trilingual dictionary.

The Human Sciences Research Council makes an annual grant available for the project.

The University of Fort Hare undertook to pay the salary of the

Director. Financial assistance for the salaries of the three assistant editors are received from the Transkei Government and the Government Council of the University of Fort Hare. The Ciskeian Government also contributes considerably.

The Project is controlled on behalf of the Council of the University of Fort Hare by a Xhosa Dictionary Committee. It has been incorporated as an integral unit of the University of Fort Hare, so that when the dictionary has been completed the organization will continue with such functions as may be decided upon by the Council of the University.

UNIVERSITY OF NATAL

CHEMICAL ENGINEERING RESEARCH GROUP

The objective of the Group, which is supported by the National Institute for Metallurgy, is the development of fundamental quantitative descriptions of mineral processing operations. Research work is conducted largely by post-graduate chemical engineering students.

INSTITUTE FOR PARASITOLOGY

The Institute for Parasitology, founded in 1958, evolved from the Amoebiasis Research Unit of the CSIR, and that Unit is now part of the Institute.

The Institute carries on research into Amoebiasis and other parasitic diseases of man and animals. It is housed in the Institute for Parasitology, adjacent to the Faculty of Medicine, with which it maintains close connection.

INSTITUTE FOR SOCIAL RESEARCH

The Institute was established at the University in Durban in 1954. Its aims are to encourage and undertake both basic research and sponsored applied research into human behaviour and relationships and to train students in advanced social research methods.

Membership of the Institute is open to all members of staff and to research fellows and scholars of the University. Its constitution also provides for the nomination of visiting and local consultants, and the award of fellowships and scholarships.

The Institute has undertaken important studies throughout Southern

Africa, and has organized seven nation-wide conferences.

The Institute is conducting research in the fields of urban industrial and political sociology, community development, urban planning and in multi-disciplinary investigations. The Institute also undertakes a wide range of consulting work.

NATAL INSTITUTE OF IMMUNOLOGY

The Institute was formed in 1968 as a division of the Natal Blood Transfusion Service and became an Institute of the University of Natal in 1970. Its main aims are to render diagnostic and therapeutic services, to promote and undertake research into immunology and assist in its teaching.

OCEANOGRAPHIC RESEARCH INSTITUTE

The Institute was established in May 1959, and is financed by the South African Association for Marine Biological Research - a non-profit public company. The Institute works in close co-operation with the Council for Scientific and Industrial Research through the S.A. National Committee for Oceanographic Research. The main function of the Institute is to carry out oceanographic research in the south-western region of the Indian Ocean.

POLLUTION RESEARCH GROUP

The Group has been established within the Department of Chemical Engineering and is sponsored by A.E. & C.I. Ltd. The research work is conducted at present by post-graduate chemical engineering students. The activities of the Group cover both air and water pollution. The objectives are to enable post-graduate students to study aspects of pollution and pollution control, and to assist industry in undertaking studies in the control of pollution at its source and in the recovery and re-use of water and chemicals.

SUGAR MILLING RESEARCH INSTITUTE

The Institute was founded in 1949 and moved into its own building on land leased from the University of Natal in 1952. It receives financial support from the South African Sugar Millers' Association Limited and a subsidy from the CSIR. The aims and objects of the Institute are to further the development of sugar processing techniques for the benefit of the industry as a whole, to establish close contact with the mills and assist them in their everyday problems, to train technologists, and to carry out research into possible other uses for sugar.

WATTLE RESEARCH INSTITUTE

The Institute was inaugurated in May 1947 as a joint undertaking of the South African Wattle Growers' Union, the University of Natal and the Government Department of Forestry. The Institute is near the Faculty of Agriculture and it operates a field experiment station on a 270 ha farm near Pietermaritzburg.

RESEARCH UNIT SUPPORTED BY THE COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR)

PLANT TISSUE CULTURE RESEARCH UNIT

This Unit studies growth and development of cultured plant cells, tissues and organs with special regard to the effects of plant growth substances on various aspects of biochemical, physiological and anatomical differentiation.

RESEARCH UNIT AND GROUP SUPPORTED BY THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (MRC)

AMOEBIASIS RESEARCH UNIT (Also see Institute for Parasitology, p.231)

This Unit was established in 1949 for the purpose of investigating the etiology, epidemiology, diagnosis and treatment of Amoebiasis.

PRECLINICAL DIAGNOSTIC CHEMISTRY RESEARCH GROUP

This Group was established in 1974 for the purpose of developing techniques to measure specifically ultramicro quantities of active biological material in biological fluids, the application of such techniques to diagnostic services and the investigation of selected clinical disorders.

UNIVERSITY OF THE ORANGE FREE STATE

HOECHST UNIT FOR BASIC CLINICAL PHARMACOLOGICAL RESEARCH

In 1974 the University of the Orange Free State and the firm Hoechst Pharmaceuticals (SA) entered into an agreement in terms of which the latter will, for a period of ten years, provide generous financial support for basic clinical research in the Department of Pharmacology.

INSTITUTE FOR CONTEMPORARY HISTORY

The Institute for Contemporary History was established in November 1970, to undertake research projects in contemporary South African history.

The following disciplines are represented in the Institute: Anthropology, Communication, Constitutional Law and Legal Philosophy, Economics, Government and Municipal Administration, Historical and Comparative Education, History, Library Science, Political Science, Sociology.

It is the task of the Institute to initiate and co-ordinate research in the various fields.

The Institute makes the Political Archives, which is the central archive of the Institute, available to outside researchers.

The following are some of the projects undertaken in 1974:

- The History of the National Party, 1914 - 1961 (3 volumes)
- The rôle of South Africa in the British Empire, 1921 - 1961
- A Bibliography of the development of Sociology in South Africa
- The Political History of South Africa
- The emancipation under international law of South African diplomacy.

INSTITUTE FOR GROUND-WATER STUDIES

This Institute was established during 1974 to initiate, stimulate and co-ordinate research in ground-water problems. The development and evaluation of techniques for determining the reclamation potential of ground-water sources is one of its main purposes. Research is directed in such a way that all kinds of water-supply problems are investigated so that all the communities may be served. In order to maintain this research on a firm basis, the Institute co-operates closely with Government bodies like the Water Research Commission, the Department of Water Affairs, the Geological Survey Branch and the CSIR.

INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH

The Institute was established in May 1964 by the University Council to undertake social and economic research. Its functions are as follows:

- To co-ordinate and encourage interdepartmental research programmes in the social and economic sciences
- to undertake specific research projects on behalf of sponsors or on its own initiative
- to assist in the mobilization of funds for the efficient organization and implementation of research
- to record and report accurately on all research under its supervision.

RESEARCH UNIT FOR THE PLANNING OF EDUCATIONAL SYSTEMS

A special research unit has been established in the academic Department of Historical and Comparative Education to attend, exclusively, to the theory and practice of the planning of educational systems for the Black nations of South Africa.

As this research can only be undertaken on an interdisciplinary scientific basis, the Unit has at its disposal, besides educationists, economists, anthropologists and sociologists as either members or fellow workers.

The research, which comprises two phases, includes a large number of subprojects.

During the first phase of the research programme priority is given to educational investigations of an historical-cultural, anthropological, demographic, economic, sociological and political nature to determine the requirements of the planning of educational systems for Black nations who are becoming independent.

The second phase will be wholly directed at educational system planning in practice. For instance, case studies of a few homelands will be undertaken. Black leaders will have to decide on their educational policies for themselves. The results of the research projects will be at their disposal to use at will.

RESEARCH UNIT AND INSTITUTE SUPPORTED BY THE CSIR

FLAVANOID RESEARCH UNIT

This unit is attached to the Department of Chemistry of the University.

INSTITUTE FOR ENVIRONMENTAL SCIENCES

This Institute, which was established in 1973, receives subvention

from the CSIR, the Orange Free State Provincial Administration, the University of the Orange Free State, the Department of Transport and the Atomic Energy Board. Research is conducted by five research groups in the Institute, viz Limnology, Palynology, Sub-Antarctic Islands (Marion and Prince Edward), Ultrastructure and Terrestrial Ecology.

RESEARCH UNIT SUPPORTED BY THE MRC

EXPERIMENTAL EMBRYOLOGICAL RESEARCH UNIT

This Unit was established in 1974 for the purpose of studying, by experimental means, the development and interrelationship of embryonic cranial organs and the genesis of congenital abnormalities.

UNIVERSITY OF PORT ELIZABETH

INSTITUTE FOR PLANNING RESEARCH

The Institute is an independent (though an integral part of the University) non-profit organization constituted for the purpose of conducting basic and applied research of a continuous and long-term nature for the purpose of providing socio-economic information for planning interests, both governmental and other (mainly on a regional basis).

The functions are as follows:

- To construct a picture of the socio-economic and functional structure of the Port-Elizabeth/Uitenhage complex;
- to compile information on all underlying factors of economic growth or decline in the area on a continuous basis;
- to conduct current research of a practical nature, the results of which can be used for planning purposes by business, the Local Authorities and the Central Government;
- to provide a statistical clearing house on business and related statistical data for sponsor and donor members of the Institute.

In the process of conducting the above it is the policy of the Institute to assist in organizing interdisciplinary research projects relevant to the Institute's objectives, involving the academic staff of the university and post-graduate students; to publish and make freely available the results of research undertaken by the Institute staff and of research assisted by the

Institute; to liaise closely with the Department of Planning in determining the nature and priority of the research programme; to liaise with other regional research organizations, e.g. Regional Development Committees and Regional Research Institutes at other universities.

RESEARCH UNIT SUPPORTED BY THE CSIR

URANIUM CHEMISTRY RESEARCH UNIT

This Unit is attached to the Department of Chemistry of the University.

POTCHEFSTROOM UNIVERSITY FOR CHRISTIAN HIGHER EDUCATION

CENTRE FOR INTERNATIONAL POLITICS

The Centre, which was established in 1966, and out of which the Chair in International Politics has now developed, forms part of the Department of International Politics. While the Department undertakes lecturing and study, the Centre undertakes research and guidance.

The Centre publishes a series, Publications of the Centre for International Politics. A recent publication includes: No. 17: The Indian Ocean in world politics - papers read at local functions during 1974.

The Centre also issues a monthly newsletter, Die Wêreld in Oënskou (The World in Review).

INSTITUTE FOR ADMINISTRATIVE AUTOMATION

The Institute, established in 1963, undertakes expansion of and research on administrative automation.

INSTITUTE FOR THE ADVANCEMENT OF CALVINISM

This Institute was founded in 1966 to conduct research on every aspect of Calvinism, especially as applied in all the different spheres of life in South Africa.

The Institute produces a short study every month, a brochure every six months, and occasionally a volume of articles by different specialists on a variety of subjects.

INSTITUTE FOR AFRICAN STUDIES

The Institute was actually founded in 1966, but was preceded by the Africa Seminar which was established in 1957 and was initiated by the Department of Ethnology and Native Administration.

In general the Institute covers the whole field of African Studies, but in practice its scope is more or less limited to Social Anthropology, Politics, Administration, Religion, Cultural Change and Economics.

The Institute conducts regular seminars, provides a post-graduate diploma course in Bantuistics and organizes study tours to African territories.

The Institute publishes a popular bulletin on African affairs, Nuus oor Afrika (News of Africa). Ten numbers appear annually. An English reproduction, Africa : News and comment, is issued six times annually.

INSTITUTE FOR BOTANICAL RESEARCH

The Institute, which was established in 1947, has the following research divisions: Plant Physiology and Plant Biochemistry; Plant Morphology; Mycology; Taxonomy; Ecology.

INSTITUTE FOR COMMUNICATION RESEARCH

This Institute, which is attached to the academic Department of Communication, has undertaken, inter alia, the following projects:

- The impact of commercial television on the printed media
- Theories in connection with information for the public media
- Parliamentary, background and depth reporting
- The film culture in South Africa.

INSTITUTE FOR CO-OPERATION

The Institute, which was established in 1965, is chiefly concerned with carrying out research on co-operatives.

The Institute's functions are to arrange symposia and/or courses on co-operation; to institute a diploma in co-operation; and to undertake research.

A research project just completed is Co-operative Management in South Africa.

INSTITUTE FOR INDUSTRIAL PHARMACY

The activities of the Institute comprise formulation and development of pharmaceutical dosage forms and in general any research regarding the various aspects of the production and control of medicines, such as manufacturing techniques and procedures, analytical procedures, and stability and biological availability trials.

INSTITUTE FOR LINGUISTIC AND LITERARY RESEARCH

This Institute, which is attached to the Department of Afrikaans-Nederlands, does research on, inter alia, subjects such as lexical theory, sociolinguistics, language acquirement in the second language and socio-literary tendencies in literature.

INSTITUTE FOR PEDOLOGY

This Institute was established in 1968. Pedological studies were undertaken of areas in the Transvaal and the Orange Free State. A study of a nature reserve of the Provincial Administration of Transvaal was also completed.

INSTITUTE FOR PETROCHEMICAL RESEARCH

This Institute was established at the end of 1974 to do research on coal liquefaction and hydrocracking for the production of fuels and petrochemicals; and on petrochemical processes.

INSTITUTE FOR PHYSICAL RESEARCH

The Institute was established in 1961 to promote research in physics at the University.

The research which is undertaken at the Institute includes research in nuclear physics and cosmic rays. Research in nuclear physics is undertaken with the aid of a 1.2 MV Cockcroft-Walton accelerator of the Potchefstroom University and a 3 MV Van de Graaff accelerator of the Atomic Energy Board.

Research in the field of cosmic rays is concentrated on the geophysical aspects of cosmic rays. (See Cosmic Ray Research Unit p. 242.)

INSTITUTE FOR PHYSIOLOGICAL RESEARCH

The Institute was established in 1965. The research programme concentrates on studying those factors which influence the con=

tractility of the heart muscle.

INSTITUTE FOR PSYCHOLOGICAL AND EDUCATIONAL SERVICES AND RESEARCH

The Institute was established during 1966 with the object of providing certain psychological and educational services to the student population of the university in the first place, and in the second place to the general public.

As the Institute is mainly an organization for providing services to students, it stands to reason that it makes only a limited contribution to research.

The functions of the Institute are as follows:

- Student information services which comprise university orientation generally; selection of subjects and planning of study courses; methods of study; and vocational guidance, including psychometric testing
- Student counselling/psychotherapy and specific student problems, viz adjustment problems; behaviour/personality/emotional problems; speech and reading problems
- Research projects connected with the above.

INSTITUTE FOR REGIONAL PLANNING

The Institute, which was established in 1965, undertakes research on spatial, economic and social aspects of town and regional planning, especially with regard to Bophuthatswana, one of the homelands.

INSTITUTE FOR SOUTH AFRICAN MUSIC

The Institute was established in 1960 to carry out research on South African Music. The Institute conducts formal training courses and seminars, and appoints research fellows to specific projects.

INSTITUTE FOR SOUTH AFRICAN POLITICS

The Institute was established in 1973 as an interdepartmental institute.

The objectives of the Institute are as follows:

- To undertake study and especially research in the field of South African politics

- to cultivate and encourage scientific interest and a knowledgeable public opinion with regard to South African political matters.

The field of South African politics is broadly outlined as follows:

- The governmental institutions of South Africa
- The political party system and party politics
- Afrikaans - English language relationships
- The problem concerning the different peoples (Non-Whites) with its various facets
- Political aspects of the country's economy and finance.

The Institute issues publications and a Topical Series consisting of studies on topical subjects and including, for example, South Africa's population problem: Is there a solution? The Coloured challenge, and South African Sport Policy 1910 - 1975.

INSTITUTE FOR ZOOLOGICAL RESEARCH

The Institute was established in 1958. Research work is mainly concentrated in three research units, viz:

- Research unit for soil mesofauna and acarology, in which investigations are concerned especially with mites which are found in plants or in the soil and the ecology of earthworms in different South African soils.
- Limnological research unit, which investigates the composition of fauna in South African rivers and dams. Surveys to determine water pollution or the productivity of water are also undertaken.
- Snail research unit (See p.243)

RESEARCH UNIT FOR CHEMICAL KINETICS

The aim of the kinetic studies undertaken is the elucidation of the mechanisms of photolytic, thermolytic, anation and equation reactions encountered in a diversity of complex ions of metals.

The Unit is also involved in research carried out at industrial establishments. Such research projects have been pre-ignition combustion kinetics of fuels, the crystallization kinetics of waxes, cementation of copper, etc.

SMALL BUSINESS ADVISORY BUREAU (SBAB)

The SBAB is a service organization for small businesses in South Africa. It is supported jointly by the Government, organised commerce and the University. Its objective is to promote the efficiency and development of small businesses.

Consultants are available to conduct on the spot investigations and to advise on technical, managerial, financial, commercial and other problems which may be experienced within the business.

Special courses and seminars aimed at the practical and daily problems of small firms are held from time to time.

Specific or project research on aspects pertaining to small business in general or in particular can be undertaken.

RESEARCH UNIT SUPPORTED BY THE CSIR

COSMIC RAY RESEARCH UNIT

This Unit, which was established in 1961, is attached to the Department of Physics. Cosmic ray intensities are monitored by fixed neutron monitors at Potchefstroom, at the CSIR Magnetic Observatory at Hermanus, and at Sanae in the Antarctic, and by mobile neutron monitors on the Antarctic research ship R.S.A. and on aircraft, in order to obtain the cosmic ray latitude distribution. These data are used to study solar modulation of cosmic rays on long or short term atmospheric attenuation and production of albedo's at the top of the atmosphere, and the effect of the South African anomalous geomagnetic field on the trajectories of these particles.

The Unit issues monthly publications of hourly data of neutron monitors at Potchefstroom and Sanae as well as Special Reports.

RESEARCH UNITS SUPPORTED BY THE MRC

RESEARCH UNIT FOR THE DESIGN OF CATECHOLAMINERGIC DRUGS

This Unit was established in 1973 for the purpose of contributing towards the design of drugs which act on catecholaminergic systems.

Drugs acting on these systems have a wide field of application in medicine. This Unit is especially concerned with drugs which may be used in asthma, cardiac drugs, anti-parkinsonian drugs

and appetite suppressants.

SNAIL RESEARCH UNIT

This Unit which was established in 1957, is working on the identity, distribution and conditions for survival of freshwater snails so that it may advise, with scientific justification, on the real or potential risk of snail-borne parasites in given situations in the Republic of South Africa.

UNIVERSITY OF PRETORIA

BUREAU FOR ECONOMIC POLITICS AND ANALYSIS

The Bureau was established on 1 January 1973 to undertake research in the field of Economics in general, and, in particular, the role of the authorities in it; to publish research results and significant standpoints, particularly of members of the Department of Economics at the University; and to give advice to organizations on specific matters.

Since its establishment three research reports have been completed on a contract basis, one of them in English, viz, Projection of population and income in the Greater Pretoria Metropole, 1970 to 2000.

The following three publications are at present being prepared by members of the Department of Economics:

- Manpower policies: A comparison of the South African System with those of the USA, the UK and OECD countries
- The foreign exchange market and exchange rate policy in South Africa
- Principles of regional economic policy with specific reference to South African problems.

BUREAU OF FINANCIAL ANALYSIS

The Bureau of Financial Analysis was established at the University of Pretoria towards the end of 1965.

The task of the Bureau is to render active support to trade and industry in its pursuit of efficient management. This support is mainly in the form of the introduction and use of modern management techniques.

The objectives of the Bureau are as follows:

- To undertake research on the development and application of modern management techniques and in particular with regard to the use of financial and statistical information;
- to make such techniques known in South Africa, to propagate the application thereof, and to take the initiative in the collection and processing of basic statistics which may be a prerequisite for such techniques;
- in general to make a real contribution to the improvement in the standard of management in the short term, especially of the small firm in South Africa, with particular reference to effective utilization of available financial and statistical information;
- to undertake contract research and surveys against payment of a fee;
- to undertake any other project which, in the opinion of the Board of Control and the University Council, may be desirable and advisable for the furtherance of the interests of the Bureau and the execution of its objectives.

The function of the Bureau in regard to inter-firm comparison is summarised as follows:

- A research function is performed in that research is being done with regard to inter-firm comparison in general and its application in specific branches of trade, industry and the professions.
- A service function is performed by undertaking inter-firm comparative surveys in specific branches of trade, industry and the professions, of which the information is fed back to the participants and in many cases also made generally known by means of publications.
- An educational function is performed through the encouragement of the use of these statistics by managements of individual concerns and in general by broadening knowledge of the nature of management.

CHILD GUIDANCE INSTITUTE

The Child Guidance Institute in the Faculty of Education was established in 1940.

Objectives

- Research in Pedagogy

- The publication of research results
- The training of students in Pedagogy
- Serving the community with regard to the education of children.

The functions and activities of the Institute are as follows:

- The examination, study and/or treatment of children with various problems, e.g. educational, learning, behavioural and physical problems. Approximately 600 children are examined per annum.
- The training of educational and guidance psychologists and teachers of secondary schools and in special education.
- A large number of research projects are in progress.
- The Institute is primarily a pedagogical institute, but also functions in co-operation and consultation with other disciplines, e.g. medicine, psychiatry, clinical psychology, social work, occupational therapy, speech therapy etc.

HANS SNYCKERS INSTITUTE

The Institute was established in 1973 in the Faculty of Medicine of the University, to study the manifestations of diseases peculiar to Southern Africa. The aims are to collect and code information on the subject; to obtain specific records of the incidence of diseases among the different ethnic groups in Southern Africa; to make this information available to researchers in this field and actively to encourage and promote such research.

INSTITUTE FOR CELLULAR PHYSIOLOGY

The objective of the Institute is briefly to determine a better correlation between cellular structure, function and specific clinical problems.

The following are some of the problems which will be investigated:

- The influence of ischaemia and trauma on brain function, brain structure and brain chemistry
- Axon transport in nerve tissues
- The role of lymphocytes and humeral factors in tissue rejection
- The role of prostoglandin in sclerosis of the bladder neck.

INSTITUTE FOR CHROMATOGRAPHY

The Institute is attached to the Department of Physical, Organic and Theoretical Chemistry. Besides offering courses in the field of Chromatography, it undertakes basic research into the various aspects of both gas chromatography and liquid chromatography, including column and detector development and data processing.

INSTITUTE FOR ECONOMETRY

The aim of this Institute is to undertake research on the principles, development and application of econometry. It is the combined endeavour of the Departments of Economics, Statistics and Computer Science at the University, and applies itself to the statistical principles and the economic application of econometry.

INSTITUTE FOR GEOLOGICAL RESEARCH ON THE BUSHVELD COMPLEX

The Bushveld Complex is a geological entity which contains mineral deposits estimated conservatively to be worth in the order of $R200 \times 10^9$. It is therefore considered to be an important mining area and as a result the larger mining companies and the University of Pretoria have decided that a geological research institute, with the Bushveld Complex as its specialized field of research, is justified.

The activities of this Institute include, amongst others, research on all aspects of the Bushveld Complex, including the volcanic rocks and the metamorphosed sediments of the Transvaal Supergroup; the collection and storage of information on the Bushveld Complex; the co-ordination of research on the Bushveld Complex; and consulting services to mining and exploration companies actively engaged in the Bushveld Complex.

INSTITUTE FOR MICROSTRUCTURES

The aims and functions of the Institute comprise research, development, education, training and services. Research is being carried out in the fields of epitaxy, thin films, electro-optics, surface physics, MOS structures, related CCD structures, integrated circuits and hybrid micro-electronics with a view to attaining fundamental and applied knowledge. It is an interdisciplinary effort by physicists and electronic engineers in which the development of, for example, electrical and optical systems which are of interest to industry, are of prime importance. In addition sophisticated services are rendered to industry and manpower trained in the necessary know-how.

An important activity of the Institute is to do meaningful research and consultation whereby it can acquire funds for its operation from the University, Industry, statutory bodies and other Government or semi-government institutions. Sophisticated equipment has been purchased to carry out research, the electron beam writing apparatus EPG-102 being the most recent. The research personnel consist of teaching staff and some, about six at present, who are fully engaged on research. Research results are being published in appropriate journals and reports, and presented at national and international conferences.

Prototype thick film circuits have been developed, for example for Fuchs Electronics, who have now built a production plant with Institute personnel in an advisory capacity.

Important impurity analyses have been carried out for industry using Auger spectroscopy.

A Summer School was held during October 1975, to introduce to industry the versatility and applicability of thick film processes as an economical microtechnology.

The Institute is funded by the University of Pretoria, the CSIR, the Atomic Energy Board and private industry.

INSTITUTE FOR STOMATOLOGY

The main aim of the Institute for Stomatology is the encouragement of basic research in the Faculty of Dentistry. Basic scientists collaborate closely with clinical scientists in the investigation of problems of general dental interest.

The main research programme is the study of mineralised bone tissue.

The functions of the Institute are to activate research and to define research priorities; to find financial aid and to canalise funds to be used for projects of appropriate clinical interest.

Projects in progress are:

- The development of a transplantation-implantation system for the substitution of large bone defects

- The role of immunity in the development of bone diseases

- The adaptability of collagen under conditions of tension a problem which is of great interest from an orthodontic point of view.

INSTITUTE FOR STRATEGIC STUDIES

The Institute is primarily a centre for research and documentation. The Institute intends to establish an authoritative reference and documentation centre on general and international strategic questions, conflict strategies, co-operative and negotiating strategies etc.; to organize regular and ad hoc meetings (conferences, symposia etc.); arrange for appropriate ad hoc publications, and initiate a programme for research on topics relevant to the Southern African, the Southern Atlantic, and the Indian Ocean regions as well as to the impact of external factors on these regions.

The Institute realises that modern strategy covers a much more wider field than just conflict situations and thus includes non-conflict strategies such as peace strategy, alliance strategy, market strategy, diplomatic strategy and so forth.

INSTITUTE FOR THE STUDY OF PLURAL SOCIETIES

The main task of the Institute, which is a specialized study centre within the Department of Sociology, is the study of the origin, characteristics and problems of societies based on a plural structure. The investigations are carried out in terms of historicity, nationality, ethnicity, manner of living, language, faith, race, caste, class, status, estate and power. Apart from the local situation attention will also be given to plural societies in other parts of the world.

MAMMAL RESEARCH INSTITUTE

The Mammal Research Institute was founded in 1966 to meet the demand for relevant facts concerning the ecology, ethology and physiology of South Africa's once plentiful variety of game mammals.

Projects sponsored or supported by the Institute include species both rare and plentiful, small and large mammals. They are being tackled in the whole of southern Africa and the bleak and inhospitable Marion and Prince Edward Islands and the shores of Antarctica itself. Research is being undertaken on niche occupation of the small carnivores and a wide variety of other mammals, the productivity of warthog, population dynamics and biology of fur and elephant seals, biological and ecological factors affecting kudu and waterbuck, migration of bats, artificial breeding of cheetah and many other topics of importance to conservationists, game ranchers, animal husbandmen and the public.

The work of the Institute is carried out on private land, in game reserves and in national parks. The Institute is funded from various sources, including the University of Pretoria, CSIR, Transvaal Division of Nature Conservation, S A Nature Foundation, Natal Parks Board, Conservation Trust of Rhodesia and the Wildlife Society of South Africa.

The University of Pretoria is well known for the specialist training courses it offers at Honours level in Mammalogy and Wildlife Management and there are many post-graduate students currently enrolled from many countries. In addition, several post-doctoral fellows are accommodated on specialist projects.

MARGARETHA MES INSTITUTE FOR PLANT PHYSIOLOGY

The Institute's aims and functions cover the investigations of the life processes of plants and the training of plant physiologists. For the past decade members of the Institute have concentrated on the symbiotic systems - especially those with nitrogen-fixation.

RESEARCH UNITS SUPPORTED BY THE MRC

BACTERIAL GENETICS RESEARCH UNIT

This Unit was established in 1964 for the purpose of consolidating and furthering the genetic work of the director and his associates on the genera *Proteus* and *Lactobacillus*.

NEURO- AND ELECTROPHYSIOLOGY RESEARCH UNIT

This Unit was established in 1971 for the purpose of investigating the influence of -

- various degrees of local chronic oxygen deficiency on the structural, biochemical, electrical and functional development of the brain
- pure components of snake venoms and active agents of animal and plant origin on the growth, the chemistry and the functions of brain cells
- electromagnetism on the growth of nerve tissue
- different types of suture material, electromagnetism and chemical substances on the regeneration of injured nerves.

PHOTOBIOLOGY RESEARCH UNIT

This Unit was established in 1973 for the purpose of continuing the work of the former Photobiology Research Group created by the CSIR in 1959. The main field of investigation concerns the effects of sunlight on the skin of man and animals as seen in South Africa. All conditions, both normal and diseased, related to reactions to sunlight, plus other processes in the skin similarly related to climate and environment, fall within the scope of this research.

RAND AFRIKAANS UNIVERSITY

APPLIED MINERALOGY RESEARCH UNIT

This Unit, which is supported financially by the National Institute for Metallurgy, undertakes research on mineralogical problems which are of importance to the metallurgical industry. It is attached to the Department of Geology of the University.

APPLIED STRUCTURAL CHEMISTRY RESEARCH UNIT

This Unit, which is supported financially by the National Institute for Metallurgy, undertakes research into the structural aspects of metallurgical processes. The Unit is attached to the Department of Chemistry of the University.

BUREAU FOR HIGHER EDUCATION

The Bureau, which was established within the University in February 1968, has the following functions:

- The gathering of information, documentation and the advancement and maintenance of contact with similar organizations
- the planning and execution (with the assistance of departments where necessary) of surveys, investigations and experiments in connection with aspects of higher education
- the submission of data, research results and proposals to the Committee of Instruction
- arranging conferences and courses for lectures in connection with university education.

INSTITUTE FOR CHILD AND ADULT GUIDANCE

The Institute was established in June 1970. The aim of the

Institute is to establish facilities for training and research, primarily at an inter-disciplinary level.

INSTITUTE FOR DEVELOPMENT STUDIES

The Institute was founded in 1970 in order to do full-time research, on an inter-disciplinary basis, on the development problem of underdeveloped areas, including the Bantu homelands of South Africa.

INSTITUTE FOR URBAN STUDIES

The Institute was established in 1970, in order to stimulate and co-ordinate research, in particular inter-disciplinary research, on problems relating to a large city.

RESEARCH GROUP FOR ENZYMES

Research activities are directed towards the relationship between primary structure and function of proteins and include enzymological studies, studies on proteins in general, and biochemical applications of enzymology.

RESEARCH GROUP FOR FRESHWATER BIOLOGY

Research includes freshwater physiology and ecology, including population studies in reservoirs and rivers and pollution studies of rivers and impoundments affected by effluents from mines and industries.

RESEARCH GROUP ON SOLID STATE ELECTRONICS

This Research Group of the Department of Electrical Engineering undertakes the following research: Characteristics of thin films (tantalum); instrument and process control of rf-cathode sputtering process; hybrid micro-circuits (tantalum); ion implantation in monolithics; signal processing in implanted monolithics.

RESEARCH UNIT SUPPORTED BY THE CSIR

MAGNETISM AND SEMI-CONDUCTOR PHYSICS RESEARCH UNIT

This Unit in the Department of Experimental and Theoretical Physics is busy, inter alia with the following projects:

- Study of magnetic properties such as magneto-elastic, anisotropy and magnetization properties of ferromagnetic and anti-

ferromagnetic materials

- Investigation by ultrasonic techniques of the elastic property of materials in relation to their magnetic properties
- Study of electronic and magnetic properties of South African minerals.

RHODES UNIVERSITY

ANTARCTIC SPACE RESEARCH UNIT

The Antarctic Space Research Unit in its present form was established in 1973, although the foundations were laid as long ago as 1962 with the appointment of the first physicists from Rhodes to the South African National Antarctic Expedition. The Research Group is now responsible for the selection and training of two physicists annually to run the programmes of ionosphere and airglow research as members of SANAE.

INSTITUTE FOR THE STUDY OF ENGLISH IN AFRICA

The establishment of the Institute was announced in July 1964, during the celebrations of the sixtieth anniversary of the foundation of Rhodes University College. In this announcement, the programme of the Institute was stated as follows:

"In the broad field of study of English in Africa, the Institute will sponsor research, collect information, provide liaison with South African and overseas scholarship, and organize conferences and courses of training for teachers and others interested in language."

Periodical conferences with teachers and refresher courses are of great importance to the work of the Institute.

Current Institute projects include the following:

- A Dictionary of South African English on Historical Principles
- A Bibliography of South African Literature in English
- A study of the practical problems involved in the establishment of a National English Documentation Centre
- English in the educational system of the Cape Province: a sociolinguistic study

- A definitive edition of the works of H.I.E. Dhlomo.

INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH

The Institute was established at the end of 1954, to provide machinery whereby the various University departments concerned might pool their resources and undertake joint research into the social, economic and historical problems of the Eastern Cape, Border and Transkei areas. In 1959 the restriction of Institute activities to a particular area was waived in respect of theoretical and comparative studies. The object of the Institute at present is to provide not merely for joint research, but also to assist any member of staff who may wish to undertake approved research.

During the last six years the Institute has been engaged on a socio-economic study of twenty-one magisterial districts in the Cape Midlands and Karoo area which was financed by the Department of Planning, the Cape Province Administration, and by contributions from local bodies.

Various new research projects have been undertaken by the Institute. Two major projects are a socio-economic study of East London and the Border region and a continuation of the study of African life and culture. Both these have been financed by grants from the Human Sciences Research Council.

The Institute annually offers a University Fellowship to the value of R5 000 for research in all social science fields. The Fellowship is intended to bring overseas scholars to Rhodes University and preference is given to persons who wish to do research on a topic of relevance to southern Africa.

LEATHER INDUSTRIES RESEARCH INSTITUTE

This Institute developed out of the Tanning Research Section of the Chemistry Department of Rhodes University College. In 1946 it became, by agreement with the Government Department of Agriculture and the Council for Scientific and Industrial Research, an independent corporate body, governed by its own Board of Control. It is recognized by the University as an Associated Research Institute and its Director is a Research Professor of the University.

The Institute operates in five sections, viz, Footwear Research Section; Hides, Skins and Abattoir By-Products Section; Leather Research Section; Personnel and Statistical Section; and Wattle Tannins Section.

RESEARCH INSTITUTES AND UNIT SUPPORTED BY THE CSIR

J.L.B. SMITH INSTITUTE OF ICHTHYOLOGY

The Institute was created at the end of 1968 to honour the founder of the Department of Ichthyology and to continue his research on fishes. The Department was essentially a research unit financed largely by the South African Council for Scientific and Industrial Research and built round the scholarship of J.L.B. Smith.

A programme leading to the M.Sc. and Ph.D. degrees is now offered. An Honours degree in Zoology is required for prospective candidates.

It is planned to expand the Institute to include the teaching of Marine Biology and Fisheries.

RHODES INSTITUTE FOR FRESHWATER STUDIES

The Institute was established in 1967 to provide a centre for freshwater studies at the University, the work of which would be complementary to that of the other National Research bodies, such as the National Institute for Water Research and the various Provincial Conservation departments.

The Institute has, with the assistance of the State Department of Bantu Administration and Development, built a research station at Lake Sibayi in Northern Zululand. The station is equipped with simple but effective equipment and one biologist is housed in the station.

The other area of research activity is the Knysna/Wilderness lake complex, and the Institute is working in association with the Water Research Commission and the Department of Nature Conservation.

TICK RESEARCH UNIT

This Unit was established in the Department of Zoology and Entomology in 1971 to provide a centre at the University for research into the biology and control of tick species.

UNIVERSITY OF SOUTH AFRICA

BUREAU OF MARKET RESEARCH

The Bureau of Market Research is the only university research institution in the Republic of South Africa which conducts basic market research. The Bureau was established in 1960 by the University of South Africa under whose auspices it still operates.

The functions of the Bureau are to promote basic market research; to carry out basic research on problems relating to marketing management, marketing research, advertising and policy making; to undertake any research which may contribute to the improvement of existing research methods and techniques in market research and/or the development of new methods; and to advance scientific study and research in the field of marketing and marketing research by means of publications, lectures, short courses, study and training.

The Bureau's quarterly magazine Research for Marketing has been replaced with Marketing in Africa. The Bureau also periodically publishes research reports.

BUREAU FOR UNIVERSITY RESEARCH

The Bureau was founded in January 1970. The Bureau developed before 1970 as the result of an institutional need of the University chiefly to conduct research and give instruction in tertiary education and specifically in the long-range methods of tuition of the University.

The functions of the Bureau are to promote research and provide information on university matters in general, university didactics and long-range tuition in particular and students' problems. The Bureau publishes Iter.

CENTRE FOR BEHAVIOURAL SCIENCES

This Centre, which was established in 1975, has been formed to meet several needs arising in departments of the University concerned with the behavioural sciences. Its main purpose is to provide facilities for basic research into behaviour.

Research on the rôle of the nervous system in the determination of behaviour is to be done on a continuing basis. For this purpose a neuropsychological laboratory equipped according to the most modern standards is at present being fitted out.

Relevant sponsored research will also be considered.

Research results will be published in reports of the Centre and by means of articles in local and overseas' scientific journals.

Facilities will be provided by the Centre for the research interests of members of staff from the various departments concerned. Where possible it will also provide facilities for such staff to demonstrate to students practical laboratory techniques applicable to behavioural research.

Finally, the Centre will provide certain specialised laboratory services whereby professional practitioners can refer selected clients or patients to the Centre for assessment or examination.

COMPUTER CENTRE

The Computer Centre serves as a central data processing facility for the University of South Africa. The main functions of the Computer Centre can be summarized as follows:

- The computer is at the disposal of any member of the academic staff or any post-graduate student of Unisa for bone fide University research work or research leading to a post-graduate degree.

- The Computer Centre is responsible for the development and operation of large information systems for use within the University.

- Scientific systems are continually developed for use within the University.

- Programmes of students in Computer Science are tested on the Computer.

- Training courses and seminars are arranged.

Punching facilities are available to Computer users.

- Various large information systems are in operation. These are:

- The Student Administration System, comprising student registrations, accounts, assignments, examinations and historical accumulation

- The General Information Retrieval System for use on various other systems

- The Salary System

The Budgetary Control System

- The Library Lending and Catalogue Systems.

A comprehensive multiresponse system for student assignments was developed and is used by various academic departments.

Various systems are being developed for use on mini-computers. These are:

- A Data capturing system for the library lending system
- A system for control of in-process publications
- Data capturing for a new financial system
- A system for the analysis of brain wave patterns (being developed for the Centre for Behavioural Science).

INSTITUTE OF EDUCATIONAL TECHNOLOGY

Despite all its possibilities and the fact that the written or printed word, the graphic medium, traditionally has developed as and still remains the dominant educational medium in Unisa's fairly unique method of teletuition, it obviously has intrinsic limitations. To prevent any possibility of a communications breakdown it is thus necessary to supplement the printed word by means of other feasible educational media.

This, though, implies that the teaching staff, the encoders of the message, should be aware of and be conversant with the various factors and principles underlying the question of media selection. It also is essential that they should know how to utilise the different media to the optimum so as to achieve the greatest measure of effectiveness and they should be able to use the various pieces of equipment with confidence and ease. Last but not least, an objective method of feedback is essential, followed up by a scientific assessment of the research data and a consequential evaluation and improvement of programme material.

The Institute of Educational Technology, formerly called the Institute for Audio-visual Aids, thus has a multiplex commission and task, namely to instruct teaching staff in the handling and use of equipment and media; to teach them the ways and means of selecting appropriate media; to assist in the encoding of information in the different media and to train them how to make optimal use of the media at their disposal. Constant research is also undertaken to determine the potential of and devise new applications for the various media. The effectiveness of existing programmes is also researched and consequential conclusions and recommendations are communicated to the staff concerned.

INSTITUTE OF FOREIGN AND COMPARATIVE LAW

The Institute of Foreign and Comparative Law has been functioning within the Faculty of Law of the University of South Africa since 1 November 1964 as a centre for advanced legal research.

Its main purposes are:

- To undertake research in any branch of law and legal science where the comparative method can be employed;
- to furnish information on foreign law and private international law to legal practitioners, government departments and commissions, statutory bodies, parliamentary committees, financial institutions, commerce and industry, immigrants, and other interested groups, provided that the Institute does not thereby encroach upon the domain of the legal profession;
- subject to the same proviso, to furnish information on South African law to foreign lawyers, business enterprises, diplomatic representatives, etc.;
- to keep in contact and exchange materials with similar institutes, law faculties and legal researchers in other countries;
- to provide research facilities for South African and foreign senior law students, law teachers and other jurists, and
- to develop a comprehensive library on foreign, comparative and private international law for the benefit of the whole country.

While these original objects are mainly related to other countries' national legal systems, the Institute is also developing, as a branch of the same organization, the Ver Loren van Themaat Centre for International Law, with research functions and a specialized library on all fields of international law.

The Institute publishes Cilsa regularly.

INSTITUTE FOR OPERATIONS RESEARCH AND STATISTICS

The Institute for Operations Research and Statistics of the University of South Africa was founded in 1975. The aim is to render service to both the public and private sectors of the country.

Public as well as private undertakings today operate in a complex economic environment and economic decision-making is becoming more and more difficult. This is because the large systems of today have so many factors influencing them that it is not humanly

possible to evaluate them simultaneously. In as far as these problems can be expressed in figures, Operations Research and Statistics supply the methodology for solving them.

As a result the demand for qualified Operations Researchers has more and more outstripped the supply. Because of the advanced mathematical training required, such persons are scarce. Consequently lecturers in Operations Research are more and more often approached with Operations Research problems. In the past assistance could only be rendered on a limited scale.

The founding of the Institute will make possible the undertaking of more embracing projects, thus making a more meaningful contribution in this important field.

Any public service department, local authority or private undertaking may approach the Institute for assistance. The service rendered will take the form of contract research, directed literature surveys and research on the application of Operations Research in certain areas.

The Institute will not have a large staff and will make use of lecturers of the University. This has the added advantage that expertise on a wider scale can be utilised effectively. The collaboration with similar institutions on excessively large problems is also envisaged.

INSTITUTE FOR THEOLOGICAL RESEARCH

The purpose of the Institute is the establishment of a centre for advanced research in Theology. This includes the undertaking of research projects in the various disciplines in the Faculty of Divinity and the publication of research information and results.

Since the establishment of the Institute in May 1975, the following five projects have been launched:

- The Methodology of New Testament Research, including the development of an information retrieval system on New Testament literature.
- Missiology project: Abstracts from books, periodicals and articles on Missiology are made and published in the international periodical 'Missionalia'.
- Church History: The need for information on the church in Africa inspired the Institute to undertake a project on this topic. One of the first aims is to prepare a bibliography

on the sources of the history of the church in Africa.

- Biblical Archaeology project: In co-operation with the University of Tel Aviv (Israel) staff members and students of Unisa will partake in the excavations of ancient Lachish.
- Catalogue of South African Theological Research: Information on theological research in South Africa (past and present) is gathered to provide researchers with data on work that has been done and so minimize duplication in research.

UNIVERSITY OF STELLENBOSCH

AGRICULTURAL ECONOMICS INSTITUTE

This Institute commenced functioning within the Department of Agricultural Economics on 1 April 1973. The main purpose of the Institute is to provide research facilities for lecturers and students. Specific research projects are also undertaken at the request of statutory or private organizations.

BUREAU FOR ECONOMIC RESEARCH

The Bureau was established in 1944. The objectives of the Bureau are as follows:

- To study economic conditions in South Africa with special reference to -
 - . business cycles in South Africa
 - . structural changes and long-term growth in the South African economy
 - . short-term, medium-term and long-term economic forecasting;
- to undertake futures research in general and in particular
 - . to survey relevant long-term tendencies for the future in order to identify possible opportunities, dangers and restrictive influences in industry
 - . compose sketches of the future describing the possible circumstances under which industries will have to function;
- to collect and analyse statistical data with reference to the above;
- to undertake specific research projects at the request of statutory and private bodies;

- to give post-graduate students the opportunity to become conversant with the methods of economic research;
- to provide research facilities to assist lecturers and students in their research work.

BUREAU FOR STUDENT COUNSELLING

The Bureau for Student Counselling was founded in 1965. It functions at present with a professional staff of 6 full-time counselling psychologists, one research psychologist and one psychometrist. A part-time clinical service is also offered, staffed by one psychiatrist and 4 clinical psychologists.

This counselling unit offers services in the fields of psychometric testing, vocational guidance, academic counselling and personality counselling. It also conducts courses in advanced reading skills as well as effective methods of study. In addition extensive research into the academic achievements and progress of university students is being done. The professional services of the Bureau are also used as training ground for graduate students in Counselling Psychology.

Although no active careers placement programmes exist, prospective employers are encouraged to visit the campus on recruitment visits during which final-year students are introduced to representatives of the various companies. Recruitment programmes are arranged by the Bureau and all the necessary facilities are made available in its Careers Library.

Through the Bureau for Student Counselling the University of Stellenbosch offers a comprehensive psychological service to its students in an attempt to assist them in the wide spectrum of decisions which they have to make during their years of studying.

INSTITUTE FOR CARTOGRAPHY

The Institute, which is situated in the Department of Geography, was established as a research and service institution in 1975.

The specific objectives of the Institute are

- to undertake research projects of which the results and conclusions are based on cartographic analysis;
- to provide cartographic services at a fixed rate to departments and institutes within the University, as well as to private and public institutions and individuals outside the University;

- to undertake lecturing on advanced cartographic techniques and procedures.

Research projects in progress, include:

- An urban-geographical study of the Cape Metropolitan area
- An atlas for the Encyclopaedia of the World.

INSTITUTE FOR ENTERPRISE AND MANAGEMENT

This Institute is a research and training unit of the Post-graduate School of Management of the University of Stellenbosch.

The aims of the Institute are as follows:

- To stimulate, encourage and support enterprise and the spirit thereof, as well as the establishment of new enterprises in South Africa
- Developing and providing training programmes for owners/managers of new and existing small enterprises in order to assist them to acquire the necessary administrative acumen and technical knowledge for the effective management of their enterprises
- Designing and providing development and training programmes for top, senior and middle management groups in South Africa
- Undertaking studies and programmes which are designed to make significant contributions to the extension of a national climate in which free enterprise and effective management can make an optimal contribution to the prosperity of South Africa.

INSTITUTE FOR LANGUAGE INSTRUCTION

This Institute, which functions in the Faculty of Arts under the guidance of a Director, was founded on 1 July 1975. The main aim of the Institute is the promotion of language instruction in South Africa over a wide terrain. The research, instruction and study undertaken with this in view, forms a unit. In addition, service and advice in connection with translation work is also provided.

The activities envisaged include curriculum research, drawing up language courses, the evaluation of existing courses, study guidance to post-graduate students, arranging refresher courses, symposia and so forth.

INSTITUTE FOR PLANNING RESEARCH

The Institute falls under the Department of Town and Regional Planning in the Faculty of Arts. The functions of the Institute are as follows:

- To undertake planning research in respect of one or more of the following aspects:
 - . the investigation and evaluation of resources in connection with town and regional planning
 - . the drawing up of development plans
 - . organization for planning and development;
- to undertake specific planning projects at the request of statutory or private bodies;
- to give post-graduate students the opportunity to become conversant with the methods of planning research;
- to provide facilities for promoting the research work of students and lecturing staff.

The Director of the Institute is also the Professor of Town and Regional Planning.

SOUTHERN UNIVERSITIES NUCLEAR INSTITUTE

See University of Cape Town, p. 228.

TRANSPORT RESEARCH CENTRE

The Transport Research Centre was established in 1965 with the following functions:

- To undertake transport economic investigations with regard to -
 - . the relationship between transportation facilities and economic development
 - . the question of the co-ordination of South African transport
 - . the economic aspects of road construction in South Africa
 - . the question of urban transportation needs in South Africa
 - . special studies of various transport sectors;
- to collect and process economic-statistical data in respect of South African transport;
- to undertake specific projects on instruction from public or

private bodies;

- to provide opportunities for post-graduate students to obtain experience in transport research and to assist lecturing staff in research matters.

RESEARCH UNIT SUPPORTED BY THE CSIR

POLYENE RESEARCH UNIT

This Unit is attached to the Department of Chemistry.

RESEARCH UNITS AND GROUPS SUPPORTED BY THE MRC

CLINICAL CYTOLOGY RESEARCH GROUP

This Group was established in 1974 for the purpose of conducting research on the diagnostic evaluation of cells derived mainly from the cervix, bronchi, bladder as well as other areas of the body, with the main purpose of obtaining an early diagnosis of cancer and an increase of diagnostic accuracy. Research is also directed at the chromosomes inside the nuclei of cells.

IODINE METABOLISM RESEARCH UNIT

This Unit was originally established in 1961 under the CSIR to perform research on iodine metabolism. This includes the normal pattern as well as any pathological conditions in man and animals related to the thyroid gland and its functions. The Unit is particularly interested in the mechanism whereby the thyroid hormone is formed and how these hormones are transported in the blood.

MOLECULAR AND CELLULAR CARDIOLOGY RESEARCH UNIT

This Unit was established in 1971 for the purpose of studying intensively and in integrated fashion the structure and function of the heart at the level of cells and molecules, so that deviations occurring during heart disease can be better understood and treated.

RESEARCH GROUP FOR THE DIFFUSE OBSTRUCTIVE PULMONARY SYNDROME

This Group was established in 1974 for the purpose of studying diffuse obstructive pulmonary syndromes.

TISSUE DAMAGE AND CELL METABOLISM RESEARCH GROUP

This Group, attached to the Department of Physiology of the Medical School, was established in 1971 for the purpose of investigating the effect of toxic substances (organic and inorganic) on cell and tissue metabolism by means of histological, electron-microscopical, histochemical and biochemical techniques.

UNIVERSITY OF THE WESTERN CAPE

INSTITUTE FOR CHILD GUIDANCE

This Institute has been established recently under the guidance of a Director. The aims are as follows:

- Research and publications in the field of Education and Child Psychology and in particular Orthopedagogics, Pedodiagnosics (psychodiagnosics) and Pedotherapy
- The training of students for educational and child psychological practice
- Rendering service to the community by means of guidance concerning the education of children, including the investigation and treatment of children with learning and educational difficulties.

INSTITUTE FOR SOCIAL DEVELOPMENT (ISD)

Already in 1967 a Bureau for Socio-Economic Research was founded at the University College of the Western Cape. This Bureau, known later as the Bureau for Socio-Scientific Research, was to conduct applied research into the social, economic, educational and related problems confronting the Coloured community, with special emphasis on the Western Cape. Activities were limited, however, since only one researcher was appointed on a full-time basis, with the teaching staff of other departments co-operating on specific projects.

Studies completed in association with the Bureau include, inter alia, two reports on Psychological Testing of First-Year Students at UCWC; one report on Academic Performance and Socio-economic Background of UWC Students as well as reports on Standardized Tests for School Children and Absenteeism of Coloured Female Labour.

During 1975 the Bureau was reorganized and reconstituted under the

new name of Institute for Social Development. According to its revised constitution the task of the ISD is to make a contribution to social and socio-economic development in South Africa, primarily by continuous scientific study of socio-economic and other matters related to the Coloured community, and the dissemination and application of such research.

WESTERN CAPE INSTITUTE FOR HISTORICAL RESEARCH

The aims of this Institute, which has been functioning since 1 January 1976, are as follows:

- To study the history of the Coloured population group on an evolutionary, integral and comprehensive basis;
- to collect, classify and file documents and sources relating to the Coloured population group;
- to undertake research projects and to publish the results of the research.

UNIVERSITY OF THE WITWATERSRAND

AFRICAN STUDIES INSTITUTE

This Institute was established in 1972 out of the former African Studies Programme. The aims of the Institute are to bring together scholars from different disciplines but with a common interest in Africa topics -

- to initiate, encourage and co-ordinate research;
- to contribute to the teaching of various courses concerned with Africa (including the B.Phil. degree in African Studies);
- to hold regular seminars, meetings and conferences, and
- to publish the results of these researches and meetings.

BERNARD PRICE INSTITUTE OF GEOPHYSICAL RESEARCH

The Institute was founded in 1937, with funds provided by the late Dr Bernard Price and the Carnegie Corporation of New York, to conduct geophysical research over a broad field.

The Institute offers unique facilities in South Africa for study and research in Geophysics. Emphasis is placed on the physics of the solid earth, including the earth beneath the sea. Higher degrees are normally awarded in Geophysics, but graduates in

Mechanical Engineering and Electrical Engineering have also taken part in Institute projects leading to higher degrees in the Faculty of Engineering.

Research in isotope geophysics is focused on geological age measurements, and the use of Sr and Pb isotopes in deciphering geological processes; facilities include a VG-Micromass 30B mass spectrometer of high resolving power and an ultra-clean chemical laboratory.

The Institute has extensive programmes for seismic studies of the earth's crust and mantle, on land and at sea. Seismic waves are recorded on magnetic tape and analysed with the aid of versatile digital data handling systems, and the digital computer.

Studies in rock magnetism are concentrated on the earth's crust in the deep ocean basins. Several research cruises are undertaken every year, in which investigations are made of the magnetic structure of the oceanic crust.

CARBOHYDRATE AND LIPID METABOLISM RESEARCH UNIT

The Unit was established in 1971 and is supported by the University Council, the Medical Research Council and the Atomic Energy Board. It has concentrated on the metabolic changes of disorders which are peculiar to or particularly common in the Republic, or which are emerging in our developing populations. Conditions studied have included obesity, diabetes, coronary heart disease, pellagra and the medical complications of alcoholism.

CARDIO-VASCULAR RESEARCH UNIT

The Cardio-Vascular Research Unit works in collaboration with the Department of Thoracic Surgery and the Cardiac Clinic of the Johannesburg General Hospital.

ECONOMIC GEOLOGY RESEARCH UNIT

The Unit was founded in October 1957, on a ten-year grant from the then Transvaal and Orange Free State Chamber of Mines. Research activities commenced in June 1959, and the Unit was absorbed into the University structure in January 1968.

It was established for the purpose of carrying out basic research into the factors controlling the distribution and localization of mineralization in Southern Africa, and of developing new approaches to mineral exploration, which can be adapted to the specific needs of the mining industry in South Africa.

The Unit is housed in the Geology and Mining Building, and collaborates with both these departments, teaching courses in Exploration Geology and supervising the research work of candidates for higher degrees in Economic Geology.

Results of the research activities appear in the Unit's own publications - Information Circulars and Annual Reports.

Recent graduates in the Department of Geology, and also from other universities, are encouraged to work for higher degrees on sponsored projects selected by the mining industry.

ENTOKOZWENI WELFARE CENTRES

There are two Entokozweni centres, one in Moletsane, Soweto and the other in Alexandra Township.

Entokozweni Early Learning and Community Services Centre

This Centre opened in February 1974 in Moletsane, Soweto. It provides day care for pre-school children between the age of six months and five years. Emphasis is on a programme of psychological and physiological research aimed at understanding the development patterns of the Black pre-school child. The co-operation of the Department of Psychology of the University has been important in the establishment of this programme. In addition a wide range of community services is provided in the form of recreational groups for children and adults living in Moletsane.

Entokozweni Family Welfare Centre

This centre in Alexandra Township provides day care for children between the ages of 2 and 6 years, as well as afternoon play centre groups for school-going children and evening groups for adolescents.

Both centres are administered by a Board of Management and a Finance and Advisory Committee on which the University Departments of Psychology, Sociology and African Medicine are represented.

ERNEST OPPENHEIMER INSTITUTE OF PORTUGUESE STUDIES

The Institute, an autonomous body within the University, was established in 1953 to promote the understanding of Portugal and Portuguese culture, language and achievements, through teaching and research. In recent years, the main activity of the Institute has been the writing of the history of Portuguese settlement

and penetration of South East Africa.

INSTITUTE FOR ADULT EDUCATION AND EXTERNAL STUDIES

The Institute provides the public with opportunities for further study in the form of courses, lectures, seminars and summer schools. A Division of Continuing Medical Education has been established.

The Institute is investigating the need for continuing education in the professions.

INSTITUTE FOR MATHEMATICS

This Institute was founded in 1968 and is governed by a Board of Control consisting of all the professors in the Departments of Mathematics and Applied Mathematics, representatives of the Department of Physics, and the Deans of the Faculties of Science and of Engineering. Distinct research projects in these departments are naturally directed by different individuals. There is no Director of Research.

METABOLIC AND NUTRITION RESEARCH UNIT

This Unit was established in the Department of Paediatrics, Baragwanath Hospital, in January 1974, to investigate problems of metabolic and nutritional disorders in African children. The Unit is housed in a building erected jointly by the Transvaal Provincial Administration and the University of the Witwatersrand, and consists of a metabolic ward with a supporting biochemical laboratory.

Current research projects include the investigation of disturbed carbohydrate metabolism in kwashiorkor, the metabolism of drugs in malnutrition, elucidation of vitamin D deficiency in Johannesburg, and the effects of malnutrition on the digestive processes.

MINING RESEARCH PROGRAMME

The Programme is an integral part of the Department of Mining Engineering and the Professor of Mining Engineering is the Director of Research. The Programme undertakes research into the mechanical behaviour of rock.

NUCLEAR PHYSICS RESEARCH UNIT

This Unit, which is supported financially by the mining industries, the University, the CSIR, the Atomic Energy Board, the National

Institute for Metallurgy, the International Atomic Energy Agency, the Chamber of Mines Research Organization, the Diamond Research Laboratory and the Water Research Commission, has its own Board of Control and a staff complement of about 60 people. Apart from the Director who holds the Chair of Nuclear Physics in the Department of Physics, members of the scientific staff participate in the teaching of Physics in the Department. The Unit also has its own complex of buildings.

The research interests of the Unit cover both low and high energy experimental nuclear physics, theoretical nuclear physics and applied nuclear physics.

The experimental nuclear physics group has as its main facilities an EN Tandem van de Graaff accelerator and a pressurized 2 MV Cockcroft-Walton accelerator.

Many applied nuclear research projects are investigated. The activation analysis research group collaborates with the National Institute of Metallurgy and the Atomic Energy Board, and is housed in the Unit. This group investigates problems of a mainly geo-chemical or geological character based on neutron activation analysis as the technique.

The Unit is also equipped with a kilocurie cobalt-60 source which is used mainly in collaboration with the Bone and Tissue Bank of the South African Institute for Medical Research. Human bones and tissues are sterilized by this 'cobalt bomb' for storing and later transplantation.

The high energy nuclear physics group has been concerned with the properties of cosmic neutrinos and high energy muons; such studies being conducted 3 000 meters below ground surface in a special excavation provided by the ERPM. This laboratory may continue to be used for studies in the fundamental properties of elementary nuclear particles in cosmic-astrophysical phenomena.

NUFFIELD LAKE KARIBA RESEARCH STATION

Lake Kariba, in South Central Africa, is one of the largest man-made lakes in the world. The Nuffield Lake Kariba Research Station is a reserve of 500 sq.km at Sinamwenda on the southern shore of the lake and at the mouth of the Mwenda River. The site is leased to the University of Rhodesia and the University of the Witwatersrand who administer it jointly. Research at the station is directed mainly towards investigations of the flora and fauna of Lake Kariba and its environs as part of a continuing programme to study the effect of the creation of Lake Kariba on the flora

and fauna of the Middle Zambesi. The station is very well suited for hydrobiological research.

PRIMATE BEHAVIOUR RESEARCH GROUP

The Primate Behaviour Research Group was formally established by the Council of the University in 1974 out of the existing Animal Behaviour Laboratory which was established in 1965.

The Group is concerned with the study of the behaviour of prosimian primates in semi-natural laboratory settings and in the field. At present the laboratory houses four species of prosimian, two of which are indigenous to South Africa, one to Central Africa and one to Madagascar.

URBAN AND REGIONAL RESEARCH UNIT

The Unit was established on a permanent basis in 1970 out of the former Urban Studies Committee. The main emphasis in the Unit is on research for physical planning, i.e., town and regional planning, directed mainly at the Southern Transvaal metropolitan region.

In 1972 the Unit agreed to undertake the research necessary for the preparation of a guide plan for the Witwatersrand at the request of the Johannesburg City Council and Metrocom, a voluntary association of Reef municipalities.

Other fields in which research has been concentrated are an analysis of the national space economy, urban social ecology, especially of Johannesburg, and the application of mathematical modelling to urban analysis.

RESEARCH INSTITUTE AND UNITS SUPPORTED BY THE CSIR

BERNARD PRICE INSTITUTE FOR PALAEOONTOLOGICAL RESEARCH

This Institute started as a Foundation in 1946 and was constituted as an Institute in 1949. The original object was to salvage and to study Karroo fossils, and to exploit the pleistocene caves of the Makapansgat area. Until 1963 it concentrated on these two fields - vertebrate palaeontology and palaeo-anthropology - bringing both to the level of international significance. In 1963 the Institute moved into a substantial building large enough for the fields of Palaeo-botany (including coal) and Micro-palaeontology (including oil) to be incorporated. Today the Institute ranks amongst one of the 5 foremost in the world with a unique coverage of the entire field of palaeontology. It publishes its

own journal - Palaeontologia Africana. It works in congenial relationship with all mining companies, attracts financial support from overseas, has a museum open to the public, and lends itself for part-time teaching in several other University Departments. It has offered facilities for research work to many outside scientists, several of whom have acquired advanced degrees at the University of the Witwatersrand.

HYDROLOGICAL RESEARCH UNIT

The Unit, which is supported by the University Council, the CSIR and the Water Research Commission, was formally established in 1970. The Unit is concerned with the development and testing of mathematical models for simulating hydrological processes in the catchments of rivers and in swamps, lakes and estuaries. The research is aimed at providing engineers and others with design tools for water control and a basis for planning water resources development.

SOLID STATE PHYSICS RESEARCH UNIT

This Unit was established by the CSIR in 1960. In 1970 it became a joint University - CSIR Unit.

The main activities of the Unit lie in the study of crystal defects by means of the techniques of mechanical testing, X-ray diffraction, and electron and nuclear magnetic resonance, and in low temperature physics including superconductivity. The Unit undertakes both pure and applied research, and efforts are made to direct studies towards materials of local economic importance such as diamond and hard metals and quartzite. The techniques of solid state physics are also applied to the study of biological materials.

RESEARCH GROUP AND UNITS SUPPORTED BY THE MRC

DENTAL RESEARCH UNIT

The Unit was established in 1954 for the purpose of undertaking dental research to provide facilities for part-time research and to afford training in dental research.

The research programme is directed towards solving clinical problems relating to dental decay, diseases of the supporting structures of the teeth and developmental abnormalities. It includes the study of the repair in bone, bone induction as well as the development and testing of dental materials.

IRON AND RED CELL METABOLISM RESEARCH UNIT

This Unit was established in 1969 for the purpose of studying iron and red cell metabolism in the various ethnic groups in South Africa. The Unit has been particularly interested in the etiology and corrective therapy in disorders associated with too little or too much iron in the body.

RESEARCH GROUP FOR ORGAN TRANSPLANTATION

This Group was established in 1974 for the purpose of studying problems in the field of organ transplantation, both under the controlled experimental laboratory conditions and in the clinical context of human organ transplantation.

LIBRARIES ATTACHED TO UNIVERSITIES

UNIVERSITY OF CAPE TOWN

UNIVERSITY LIBRARY

The University Library, consisting of approximately 648 000 volumes, is housed in eight libraries: the J.W. Jagger Library, the Architectural Library, the Brand van Zyl Law Library and the Carleton Harrison Education Library, Rondebosch; the Medical Library, Observatory, and the Institute of Child Health Library, Rondebosch; the Music Library, Rosebank; the Hiddingh Hall Library, Cape Town.

The J.W. Jagger Library is the headquarters of the University Library Service. It contains 445 000 volumes and has reading-rooms which can accommodate 600 readers. The Jagger Library receives about 4750 periodicals.

Royal Society: The library of the Royal Society of South Africa is housed in the Jagger Library and includes 491 current and 854 non-current titles of scientific journals.

The Medical Library serves the joint staffs of the Groote Schuur Hospital and the Medical School as well as medical students and the members of the South African Medical Association. The library contains approximately 76 000 volumes, including the collection of the Medical Association of South Africa (Cape Western Branch). About 1500 medical periodicals are received in the Medical Library.

The Institute of Child Health Library which is a sub-branch of the Medical Library specializing in all aspects of paediatrics, is housed in the Institute's building at the Red Cross War Memorial Children's Hospital, Rondebosch. A feature of the library is its well-equipped audio-visual section, which includes audio-cassettes, video-cassettes and tape-slide programmes with the necessary viewing and listening equipment.

The Hiddingh Hall Library contains about 56 300 volumes of books and periodicals in the fields of Accounting, Fine Art and Dramatic Art.

The Music Library is in the College of Music. Turntables are available in specially equipped listening rooms. The collection consists of 9 000 books and bound periodicals on music and ballet, approximately 36 800 items of printed music and 9 600 gramophone records. There is also a growing collection of music by South African composers.

The Architectural Library is in the School of Architecture. The collection consists of 16 500 volumes on architecture and allied subjects, together with collections of photographs, drawings, slides and architectural plans, and information files of press cuttings and of trade and technical literature. The libraries of the Cape Provincial Institute of Architects and of the Western Cape Chapter of the Association of South African Quantity Surveyors are housed in this library.

The Brand van Zyl Law Library: The collection consists of 16 800 volumes and includes an almost complete set of South African law reports. Many legal journals are received. The Van Zyl Collection of about 2 500 volumes by Dutch authorities chiefly on Roman-Dutch Law is in a special seminar room.

The library of the South African Institute of International Relations (Cape Town Branch) is housed in this library.

The Carleton Harrison Education Library is in the Education Building. The collection consists of 23 000 volumes, and includes a specimen collection of children's books, a collection of school text-books, and a large collection of pictures for use in teaching.

Special Collections

That portion of the library's stock which, because of rarity, fragility or value, is not available for loan, is administered by the Special Collections Department which has its own reading room in the Jagger Library. They include the following:

- The Africana Collection consists of books, periodicals, pamphlets, official publications and original manuscripts, particularly on Southern Africa. The collection includes a large number of the works of early travellers and missionaries.
- The Ballot Collection consists of 900 volumes in many languages and on many subjects. It is a typical "gentleman's library" of the late 18th and early 19th century in South Africa.
- The Bowle-Evans Collection consists of 419 volumes of English literature, history, topography and local history, most of the works being published in the 17th, 18th and the early 19th century. It is typical of the tastes and interests of educated English readers of the times.
- The Cameron-Swan Collection contains some 400 volumes on Scottish literature, history, culture and thought.
- The Crawford Collection of monographs on mathematics.
- The Kipling Collection consists of approximately 3 000 items

by and about Rudyard Kipling. The collection is indexed in minute detail and includes manuscript, pamphlet and pictorial material, as well as 25 volumes of press cuttings.

- The McGregor Collection of Modern English Poetry, consisting of about 2 500 volumes, covers poetry published in England and the Commonwealth during the period since 1900 and includes a large number of poetry magazines.
- The Jack MacLean Memorial Collection of 900 volumes includes books on arts and crafts, antiques, travel, histories of European cities, horticulture, interior decoration and the history of Cape Town.
- The McMillan Collection consists of a collection of illustrations of South African interest of about 20 000 items.
- The Rare Book Collection contains specimens of early printed works including some incunabula. Included in the collection are specimens of book illustration, fine printing and fine binding.
- The Sibbett Collection consists of 400 pictures, including portraits of Cecil Rhodes, photographs of important events during his life and portraits of his South African contemporaries. Many are unique pictures of great historical interest, including a large number of cartoons by D.C. Boonzaaier.
- The Bertha and Ellis Silverman Collection consists of over 600 volumes of Modern Hebrew Literature, as well as 200 volumes of older Hebrew works, published in the 17th to 19th centuries.
- The Willis Collection contains 900 volumes on naval and aeronautical history.
- The Medical History Collection, housed in the Medical Library, consists of over 700 volumes of publications of some significance in the history of medicine, from the 16th to the 19th century. Sections are included on Medical Africana and on the history of the Medical School.
- Music Africana, housed at the Music Library, consists of music by South African composers or concerning South African subjects.
- The Van Zyl Collection consists of about 2500 volumes, chiefly on Roman-Dutch Law, including many 17th and 18th century legal works. It is housed in the Brand van Zyl Law Library, and the books are available for use in the Library only.
- The Manuscripts and Archives Division administers the various manuscript collections, the Leo Marquard Collection (comprising the NUSAS Archive) and the University Archive.

The Manuscript collections include over 335 000 items (letters, journals, author's manuscripts, legal documents, business

records, etc.) and are particularly strong in manuscripts by and about South African literary and historical figures. They include, inter alia, the manuscripts and letters of C. Louis Leipoldt, some 1500 letters of Olive Schreiner and letters and literary manuscripts of Pauline Smith; the Sir Patrick Duncan Collection (documents and papers of the former Governor-General for the period 1900-1943), and papers and manuscripts of Dr W.H.I. Bleek (1827-1875) on Bushman and Bantu linguistics and ethnology. Music is represented by manuscripts of W.H. Bell, Erik Chisholm and other South African composers.

The University Archive comprises the original records relating to the history of the South African College from its foundation in 1829, and of the University since 1918. In addition, there is a variety of other documents, publications, pictorial and other material concerning past students, staff and student activities.

BOLUS HERBARIUM AND LIBRARY

The library of the herbarium contains a comprehensive collection of works relating to South African systematic and geographical botany, and numerous European and American serial publications and botanical works.

GEOGRAPHY REFERENCE AND MAP LIBRARY AND CARTOGRAPHIC UNIT

A collection of reference works, textbooks and geographical journals for the use of students attending courses in Geography is housed in the Geography Reading Room. A comprehensive sheet map collection is available for reference purposes in the Map Library.

A fully equipped Cartographic Unit has been established in the Geography Department and is available to serve cartographic and art requirements in the University.

UNIVERSITY OF DURBAN-WESTVILLE

UNIVERSITY LIBRARY

The library, which was established in 1961, contained 84 464 volumes at the end of 1974. Special collections include Indiana and Fine Arts. Among the recent donations was a fine collection of books on English literature and Fine Arts donated by the British Council.

UNIVERSITY OF FORT HARE

HOWARD PIM LIBRARY

The Library contains about 95 000 volumes. It also contains a valuable Africana collection known as the Howard Pim Collection of Africana.

UNIVERSITY OF NATAL

UNIVERSITY LIBRARY

The Library is operated in Durban as well as in Pietermaritzburg. Books and periodicals at one branch are made available, on request, at any other point in the system. A selection of periodicals is circulated and exchanged regularly between Durban and Pietermaritzburg.

University Libraries in Durban

MAIN LIBRARY, MEMORIAL TOWER BUILDING

This library houses books and periodicals in the subject fields covered by the Faculties of Arts, Commerce, Education, and Social Sciences, and certain departments of the Faculty of Science (viz Biological Sciences, Geography, Geology, and Psychology). It contains about 150 000 volumes. Special collections include the Powell Collection of Early Science and Technology and the Webb Collection which contains works written by Africans and American Negroes.

Architectural Branch Library: This library, which contains more than 4 000 volumes, serves the Faculty of Architecture and Allied Disciplines (which includes the Department of Town and Regional Planning).

Eleanor Bonnar Music Branch Library: This library serves the Department of Music, and contains about 2 000 volumes.

G.M.J. Sweeney Law Branch Library: This library serves the Faculty of Law with a collection of more than 7 000 volumes.

Science and Engineering Branch Library: This library serves the Faculty of Engineering and those departments of the Faculty of Science which are not served by the Main Library mentioned above. The holdings of this library are about 21 000 volumes.

MEDICAL LIBRARY

This library, together with its branch at Wentworth, serves the staff and students of the Faculty of Medicine and also members of the South African Medical Association. Besides material in the medical field, it contains books on the pre-clinical subjects of Zoology, Botany, Physics and Chemistry, and also on English and Sociology. Its total stock is about 27 000 volumes included in which is the Florence Powell Cancer Research Library.

KILLIE CAMPBELL AFRICANA LIBRARY

This library, donated by the late Dr Killie Campbell to the University of Natal and now operated as a branch of the University Library, contains about 37 000 books and pamphlets and specializes in South African Church History and in Bantu Africana. Some interesting items include the Colenso letters and papers and Colenso's Commentary on Frere's Policy with marginal notes in his own handwriting; Chase's Natal Papers, Moodie's Records and Chadwick's Commentaries on Native Law.

University Libraries in Pietermaritzburg

UNIVERSITY OF NATAL LIBRARY (PIETERMARITZBURG)

This library was established in 1912. It supplies the requirements of the Faculties of Arts, Science, Commerce, Education and Law, and contains about 108 200 volumes and 25 500 periodicals. Special collections include 5 000 volumes. The Library of St Saviour's Cathedral which specializes in Nataliana is also housed in the University Library.

AGRICULTURE LIBRARY

The Agriculture Library, formerly the Natal Region Library, is a branch library of the University Library. It contains 8 200 books, 8 500 periodicals and 21 300 pamphlets, and serves the staff and students of the Faculty of Agriculture.

UNIVERSITY OF THE NORTH

UNIVERSITY LIBRARY

The Library contains 74 950 volumes. The staff consists of 4 professional members and 17 non-professional members.

UNIVERSITY OF THE ORANGE FREE STATE

UNIVERSITY LIBRARY

The Library contains about 234 000 volumes, as well as a special collection on Africana and the Henriëtte Stockdale Collection (Nursing Archives).

Branch libraries

The Medical Library is at present housed in the National Hospital until the completion of the Medical Faculty Building.

The Music Library is housed in the Conservatorium of Music and the following music material is available: gramophone records, sheet music and small scores.

The Rabie Saunders Library in the Faculty of Agriculture houses the agriculture collection of the University Library.

UNIVERSITY OF PORT ELIZABETH

UNIVERSITY LIBRARY

The library is housed in a new building of advanced design which can accommodate 750 000 volumes and 1 000 readers. At present the library contains approximately 185 000 volumes, the L.C. Steyn collection of books on Roman-Dutch Law being the most outstanding special collection. Periodicals currently received number 3 000.

The U.P.E. library system is very strongly centralized; the existing branch library for the natural sciences and architecture on the University's Bird Street Campus will be incorporated into the main library as soon as all the academic departments have been transferred to the Summerstrand campus. The library is equipped to cope with the demands set by the increasing use of audio-visual teaching aids at the University. The staff numbers 46.

POTCHEFSTROOM UNIVERSITY FOR CHE

FERDINAND POSTMA LIBRARY

This is the main university library and contained 349 476 volumes in 1974. The library has two branch libraries, viz the Music library and the Theological library. Special collections include the Carney African Collection, the Hertzog Collection of Roman Dutch Law and the Ossewa Brandwag Collection.

The library compiles the Union Catalogue of Theses and Dissertations of the South African Universities and Abstracts of Theses and Dissertations accepted for Higher degrees in the PU for CHE.

UNIVERSITY OF PRETORIA

MERENSKY LIBRARY

The Merensky Library, which is the main library, is situated on the Main Campus of the University. Apart from the general book stock comprising about 500 000 bound volumes, the library also has a special study collection to provide for the needs of the undergraduate students. A staff of subject librarians specializes in information retrieval and assistance to readers.

The Library has the following branch libraries: the Macfadyen Library which serves extra-mural students, three medical libraries, a veterinary library at Onderstepoort, a music library and an agricultural library.

Besides various smaller special collections the main library has a good representative Africana collection.

RAND AFRIKAANS UNIVERSITY

UNIVERSITY LIBRARY

The library contained 195 000 volumes in 1974. The library which was established in 1967 plans to computerize the whole library system.

RHODES UNIVERSITY

UNIVERSITY LIBRARY

The books and bound periodicals in the library totalled 204 179 volumes at the end of 1974.

Special collections include the Cory Library for Historical Research which is housed in the main library; Archives of the Methodist Church of Southern Africa (part of Cory Library); and Ichthyology (in separate department).

Cory Library for Historical Research: The nucleus of this Library is the collection of books and manuscripts bequeathed to Rhodes University College by the late Sir George Cory. In addition to a valuable collection of books and pamphlets and an almost complete file of the "Grahamstown Journal", it contains a large number of original documents (letters, journals, etc.) relating to the history of the Eastern Province.

LEATHER INDUSTRIES RESEARCH INSTITUTE LIBRARY

The library, which contains more than 3 000 volumes, specializes in Leather Chemistry. The books and bound journals of the library are catalogued as part of the collection of the Rhodes University Library.

UNIVERSITY OF SOUTH AFRICA

SANLAM LIBRARY

The facilities of the Sanlam Library are available free of charge to all students enrolled for tuition.

The University has regional libraries in Cape Town, Durban and Windhoek and a library depot in East London, which are linked by telex with the main library in Pretoria.

The library has more than 500 000 volumes. It specializes in the fields of Bantu Languages and Recent Literature on Africa. Special collections include the Van Schaik Africana Collection; Government Publications (S.A.); Collection on German contribution to South African culture; Law Library (specializing in International and Foreign Law); United Party Archives; Unisa Archives; Unisa Documentation Centre for African Studies.

UNIVERSITY OF STELLENBOSCH

CARNEGIE LIBRARY

The University Library consists of about 450 000 volumes housed in a main library (the Carnegie Library), five branch libraries and sixteen departmental subject collections.

The branch libraries serve the Conservatorium of Music and the Faculties of Agriculture, Theology, Medicine/Dentistry and Commerce and Administration (extra-mural).

Special collections in the Carnegie Library comprise Africana, Roman and Roman Dutch Law, Official Publications, theses, manuscripts and rare books.

Notable units in the Africana room are the bequests of W.F. Leyds, Hugh Solomon, Gustav Preller and Melt Brink.

The manuscript collection includes the D.F. Malan documents (history and politics); the N.P. van Wyk Louw bequest (mostly holograph manuscripts - Afrikaans literary history and criticism) supplemented by the collection of letters comprising the W.E.G. Louw donation; Johannes Henoch Neethling family letters (history) and the Maggie Laubser papers (South African art).

Special collections in the medical library include Medical Africana, medical rare books and medical theses.

The Albert Coates Collection of musical scores and the Eric Miller Collection of gramophone records are housed in the library of the Conservatorium of Music.

The D.F. Malan Museum is housed in the Carnegie Library.

UNIVERSITY OF THE WESTERN CAPE

UNIVERSITY LIBRARY

The library has a collection of 68 000 volumes and subscribes to about 800 periodicals. It contains an Africana collection with the emphasis on Cape history and works on and by Coloureds.

UNIVERSITY OF THE WITWATERSRAND

UNIVERSITY LIBRARIES

The University libraries consist of two central libraries and seventeen divisional and constituent libraries. The bookstock of all these libraries numbers some 600 000 volumes.

Central Libraries

The central libraries comprise the University's reference and research library named the William Cullen Library, and the Wartenweiler Library, which is primarily an undergraduate teaching library largely orientated to students in the Faculty of Arts.

WILLIAM CULLEN LIBRARY

Features of this library include:

- The Reference Reading Room, which contains some 15 000 works of a bibliographical or scholarly nature
- The Government Publications Room, which contains about 15 000 bound volumes of official publications of South Africa and other countries
- The Papers Reading Room, which serves readers using the library's extensive holdings of historical and literary papers and other archival material
- The University Archives Room, which contains photographic and documentary records relating to the University, including ancillary material such as staff publications, theses, dissertations and files of press cuttings
- The Bibliography Room, which contains some 3 000 volumes in the fields of printing, book illustration and heraldry
- The Palaeography Room, which contains the library's 90 incunabula, medieval deeds and other written material from the period before printing, together with modern reproductions of illuminated manuscripts
- The Early Printed Books Rooms, which contain the bulk of the library's holdings of such material grouped by periods and supplemented by a collection of modern fine books.

Special Collections

Among the special collections housed in the library are:

- The Africana Collections (75 000 volumes) comprising the library's holdings of material on Africa printed before the end of the nineteenth century, together with an ancillary collection of more modern works. These collections are largely the outcome of the purchase of the private library of John Gaspard Gubbins in 1930, and that of James Humphreys in 1972. The latter collection also contains the nucleus of a History of Mining Collection.
- The Central Record Library of the Church of the Province of South Africa contains about 750 volumes illustrating the historical development of the Anglican Church in South Africa, and numerous pamphlets and serial publications published by individual dioceses and churches.
- The Landau Collection of Hebraica and Judaica bequeathed by the late Professor J.L. Landau, numbers about 5 000 volumes and includes many early editions of the classics of Hebrew literature.
- The Hoernlé Philosophical Library contains about 1 000 volumes in the field of philosophy, bequeathed by the late Professor R.F. Alfred Hoernlé.
- The Ernest Oppenheimer Collection of Portuguese Studies (2500 volumes) contains many early printed and modern fine books in its field.
- The Paul Brunton Collection of Egyptology (4 000 volumes) has grown from the original private library given to the University by the late Paul Brunton.
- The Libraries of the South African Association for the Advancement of Science and the South African Geographical Society consisting of periodicals and other serial publications received in exchange for the respective journals of these bodies are also housed in the Old Main Library.

WARTENWEILER LIBRARY

This Library, with a seating capacity for 2 000, includes a self-contained Overnight Library which specializes in offering a reserved book service to undergraduate students, and also houses twelve Advanced Study Rooms designed to serve the post-graduate needs of the Faculty of Arts.

Divisional and Constituent Libraries

The Biological Sciences Library (6 000 volumes) is housed in the Biology Building and primarily serves staff and students in the

Departments of Botany and Zoology; the adjacent Moss Herbarium contains a collection of early printed works in the field of systematic botany.

The Business Administration Library (5 000 volumes) is housed in the Graduate School of Business Administration in Parktown and primarily serves its staff and students.

The Dental Library (5 000 volumes) is housed in the Oral and Dental Hospital. It serves not only the staff and students of the University, but also members of the dental profession.

The Drama Library is housed in the Wartenweiler Library. It includes the Saul A. Klagsbrun Collection of Modern Drama.

The Earth Sciences Library (6 000 volumes) is housed in the Mining and Geology Building. It contains material in the fields of geology, mining and related subjects.

The Engineering Library (17 500 volumes) is housed in the South-West Engineering Building and primarily serves all departments of the Faculty of Engineering.

The Environment Library (formerly Fine Arts/Architecture/Quantity Surveying/Building Science and Town Planning) (10 000 volumes) is housed in the John Moffat Building. Integrated with this library are the Carnegie and Howard Pim Collections of Fine Arts.

The Geography Library (2 500 volumes) which also contains the bulk of the University's collection of maps, is housed in the Central Block and serves primarily the staff and students of the Department of Geography and Environmental Studies and of the Urban and Regional Research Unit.

The Geophysics Library is housed in the Bernard Price Institute for Geophysical Research.

International Affairs Library (Jan Smuts House) includes the Library of the South African Institute of International Affairs, and the International Organizations Collection (United Nations publications, etc.) and the Library of the late Field-Marshal J.C. Smuts.

The Law Library (12 500 volumes) is housed in the Central Block. Apart from sets of law reports it contains the Leonard Memorial Collection, the Arthur Suzman Library of Legal Literature, and nearly 1000 medieval and Roman-Dutch works printed in the sixteenth, seventeenth and eighteenth century.

The Mathematical Sciences Library is housed in the Central Block.

The Medical Library (60 000 volumes) which is housed in the Medi-

cal School, serves not only the staff and students of the University but also members of the hospital staff and the medical profession in general.

The Music Library is housed in Senate House and the

Nuclear Physics Library in the Nuclear Physics Research Unit.

The Palaeontology Library (3 000 volumes) is housed in the Bernard Price Institute for Palaeontological Research. It contains the S.H. Haughton Collection and includes material not only in the palaeontological field but also in related aspects of geology.

The Physical Sciences Library (15 000 volumes) is housed in the Physics Building.

UNIVERSITY OF ZULULAND

UNIVERSITY LIBRARY

The library contained 67 055 volumes at the end of 1974.

CHAPTER 8

MUSEUMS ATTACHED TO OR NEAR UNIVERSITIES

UNIVERSITY OF CAPE TOWN

University Museums

ARCHAEOLOGICAL MUSEUM

The School of African Studies possesses a working museum, under the direction of the Department of Archaeology, containing ethnographical and archaeological collections, both representative in particular of the cultures of the prehistoric and present indigenous populations of South Africa.

P.A. WAGNER MUSEUM

In the Department of Mineralogy and Geology is displayed the outstanding collection of South African minerals of economic interest, presented in 1921 by Dr Percy Albert Wagner. Also on display is the comprehensive mineral collection presented by Professor E. Newbery (Professor of Physical Chemistry, 1919-1950) which includes a valuable set of cut and polished semi-precious gem-stones.

In addition to the above displays, the P.A. Wagner Museum is the repository of a growing collection of reference material which is of great value in connection with mineralogical research.

IRMA STERN MUSEUM

The Museum, housed in the artist's old home "The Firs" in Rosebank, is administered by the University of Cape Town. The museum and its contents present a lively and fascinating record of an outstanding artist, not only through her own work but also through the visible results of her catholic interest in the art and craftsmanship of other cultures. The unique and extremely valuable private collections include, inter alia, Egyptian and archaic Greek, oriental and pre-Columbian art; religious art of several kinds; central European carnival masks and African tribal carving.

Non-university Museums

SOUTH AFRICAN MUSEUM

The South African Museum was founded 1825. In 1855 the Museum became a properly organized scientific institution.

The South African Museum houses natural history, archaeological and ethnological exhibits, study collections, administrative offices, laboratories, library and planetarium. Its functions include research, collection, preservation, display and education.

Research comprises: Biology and taxonomy of living marine and land animals; taxonomy of fossil faunas of the Permo-Triassic of the Karoo and the Pleistocene period of the south-western Cape Province, Early, Middle and Late Stone Age cultures associated with prehistoric man, (the National Archaeological Data and Rock Art Recording Centre is housed in the Museum); material culture of indigenous human races of southern Africa.

The work of the Museum is undertaken by the following research departments: Ethnology, Entomology, Archaeology, Herpetology, Marine Biology, Ornithology, Palaeontology, Palaeomammalogy; and the Group for Cenozoic Research in the Southern Cape, which is supported by the CSIR.

Research results are published in a journal, Annals of the South African Museum.

SOUTH AFRICAN CULTURAL HISTORY MUSEUM

The Museum was officially opened in April 1966. The Archaeological Department covers Egyptian, Greek and Roman civilisations; another section is devoted to oriental cultures. In addition to these the Museum has on permanent display an Arms and Armour section, a complete display of South African postal history and a history and collection of South African currency. A section on Cape Malays incorporates not only costumes but also Afrikaans works in Arabic script on religious themes.

UNIVERSITY OF FORT HARE

University Museum

F.S. MALAN MUSEUM

The Museum was established in 1941 as an ethnological study museum under the Department of Anthropology, a research museum with opportunities for outside research workers and a visiting institution for school children and other interested persons.

Since its inception the museum has collected over 10 000 exhibits, the bulk of which came from two donors. The first donation was received from the Department of Bantu Education which divided the exhibits of the Union Festival among the University Colleges of the Republic; the second was a donation by Mrs M.E. Kirkwood of Johannesburg of 7 000 articles comprising the Estelle Hamilton-Welsh Collection. The Collection, which consists only of articles made and worn by Africans, was made over a period of many years commencing in the 1880s.

The Museum has a full-time curator working in conjunction with an assistant curator and a Museum Committee.

Since 1965 a gallery of contemporary African art, the A.J.D. Meiring Art Gallery, has been added to the museum. The gallery is much involved with the promotion of African art and African artists.

UNIVERSITY OF NATAL

Non-university Museums

NATAL MUSEUM, PIETERMARITZBURG

The Museum was founded in 1903 and is one of the National Museums of South Africa. The Institution is administered by a Museum Council (appointed by the Minister of National Education) and by representatives from the Natal Provincial Administration and the City Council.

The display collections illustrate a wide range of fauna and other disciplines. The most outstanding sections include mammals, birds, economic insects and ethnology.

The main fields of research include the following: Diptera, Arachnida, Mollusca, Mammalia, Ethnology and Archaeology. There are also extensive study collections in each field of research and a well-appointed reference library.

Publications of the Museum include: Annals of the Natal Museum (since 1906) and Occasional Publications of the Natal Museum (since 1974).

DURBAN MUSEUM

The Durban Museum came into being in 1887 when the collections of a local natural history society were taken over by the Municipality of Durban. The complex is an independent municipal department answering to the City Council through its Amenities Committee.

Research comprises taxonomic work on birds of Southern Africa. Annual expeditions are organized and the research collection of birds is now of paramount importance in the study of Southern African birds. Research reports on the material appear both in South African and overseas publications.

Research facilities are available, and the facilities of a large scientific library are also to hand.

Publications include: Durban Museum Novitates and Annals of the Durban Museum (to 1951).

UNIVERSITY OF THE ORANGE FREE STATE

Non-university Museums

NATIONAL MUSEUM, BLOEMFONTEIN

Established in 1877, the National Museum is both a Natural and Cultural History Museum. It is under control of a Council and is financed via the State Department of National Education. It houses collections and displays of ethnology, anthropology, archaeology, palaeontology, geology, entomology, local history, historical costume, philately, numismatics and art.

Research is undertaken in the following fields: Mammalogy, Herpetology, Ornithology, Karoo Palaeontology, Pleistocene Palaeontology, Invertebrates, Archaeology, Ethnology, Local History.

Research publications include Memoirs van die Nasionale Museum and Navorsinge van die Nasionale Museum.

WAR MUSEUM, BLOEMFONTEIN

The War Museum was founded on 30 September 1931 by the Women's National Monument Commission in order to preserve, exhibit, catalogue and make available to research workers historical material such as relics (made by prisoners of war), war documents, clothing, photographs, reading matter, household articles and war diaries, etc.

The Museum is governed by the Board of the War Museum which is responsible to the Minister of National Education and the Secretary for National Education.

The Museum undertakes documentary research in co-operation with universities, archive depots, museums and private concerns.

UNIVERSITY OF PORT ELIZABETH

Non-university Museum

PORT ELIZABETH MUSEUM

The Port Elizabeth Museum complex includes an Oceanarium, a Snake Park, a Tropical House, as well as the museum on the sea-front in Humewood. The Museum also runs an historic house museum, No. 7 Castle Hill, near the city centre. This is the oldest house in Port Elizabeth.

The Museum is one of the Cape Provincial Museums. It contains displays on marine biology, cultural history, archaeology, ethnology and ornithology. The Snake Park displays reptiles and the Tropical House attached to it displays tropical vegetation, birds and reptiles. Dolphins, various species of seals, seabirds, sea fishes and marine invertebrates are displayed in the Oceanarium which has the only permanent dolphin show in South Africa.

The main research projects are an investigation of the plankton and ecology of South African estuaries, a study of dolphin behaviour and taxonomy, and work on laboratory controlled rearing of penaeid prawns. Research is also carried out in the fields of herpetology, ornithology and local history. The Museum includes a special reference library which caters for the needs of the

scientific staff.

POTCHEFSTROOM UNIVERSITY FOR CHE

CULTURAL HISTORY MUSEUM

The University's valuable collection of museum-pieces have been loaned to the City Council of Potchefstroom according to a written agreement. They are displayed as a separate collection in the Museum of the City Council.

UNIVERSITY OF PRETORIA

Non-university Museums

NATIONAL CULTURAL HISTORY AND OPEN-AIR MUSEUM

The Museum was constituted as an independent and autonomous museum by declaration of the Minister of Education, Arts and Science on 21 August 1964. Before 1964 it was a part of the Transvaal Museum which has been in existence since the foundation of the State Museum of the South African Republic in 1893. It was renamed the Transvaal Museum in 1904.

The Museum complex consists of the Museum Building in Boom Street which houses the administrative offices, library, storerooms and most of the divisions; the Kruger House Museum in Church Street; the Voortrekker Monument Museum; and the Pioneer House Museum, Silverton. In addition, a considerable part of the Museum's military objects are on loan to the Klapperkop Fort Museum. An Open-Air Museum is to be built in the Fountains Valley on a site donated by the City Council of Pretoria.

There are nine professional divisions in which research is carried out, and a section for education and information. The divisions are as follows: Archaeology, Ethnology, Restoration of Antiquities, Numismatics and Philately, History, Cultural History, Kruger House Museum, Voortrekker Monument, Open-Air Museum.

TRANSCVAAL MUSEUM

The Transvaal Museum was founded in 1893 as the "State Museum" of the S.A. Republic, but later became the Transvaal Museum, one of the four large government or national museums in South Africa.

The Transvaal Museum is now a purely natural history museum, as its former Cultural History Section (including Ethnology and Archaeology) was set up as an independent institution, namely the National Cultural History and Open-Air Museum, in 1964.

The Transvaal Museum, with the assistance of the CSIR, maintains the Desert Ecological Research Unit in South-West Africa.

The Museum comprises the following divisions:

- Division of Entomology
 - . Section General Entomology undertakes research in taxonomy, ecology, distribution, etc. of insects, except Lepidoptera and Coleoptera.
 - . Section Lepidoptera (Rhopalocera and Heterocera) undertakes monographic studies of Southern African Lepidoptera and investigation of leaf-mining insects.
 - . Section Coleoptera undertakes monographic studies of Coleoptera in Southern Africa.
- Division of Lower Vertebrates and Invertebrates (excluding insects). Research is mainly confined to studies on the reptiles and amphibians of Southern Africa; extensive named collections of invertebrates are maintained.
- Division of Mammalogy which undertakes research in taxonomy, distribution, populations and habits of South African mammals (in particular the insectivores and rodents); zoological survey work in co-operation with related bodies and organizations.
- Division of Ornithology which undertakes research in taxonomy, ecology, distribution, migration, etc. of birds.
- Division of Palaeontology undertakes studies on the Pleistocene Period in Southern Africa, with particular reference to the fossil ape-men or australopithecines. The Division has very large collections of fossils from Transvaal caves, also Karoo reptilian fauna.

The Museum has a large specialized library covering the above-mentioned natural sciences and maintaining a valuable collection of Africana and complete sets of early scientific periodicals.

Publications include Memoirs; Annals and Bulletins of the Transvaal Museum.

The Museum also has a Division of Education.

RHODES UNIVERSITY

Non-university Museum

ALBANY MUSEUM, GRAHAMSTOWN

The Albany Museum was founded in 1855 and is housed in two buildings adjacent to the Rhodes University campus. The History department is housed in the 1820 Settlers' Memorial Museum. The curator of the Museum's herbarium is a member of the staff of the Botanical Research Institute (Department of Agricultural Technical Services) while the Officer-in-Charge of the National Freshwater Organisms Collection is a member of the National Institute of Water Research (CSIR). Temporarily attached to the Museum is the Kudu Research Unit of the Department of Nature Conservation (Cape Provincial Administration). The five natural history museums of the Cape Province are served by the Museum's librarian whose headquarters are at the Albany Museum.

The most important collections in the Museum are of amphibians, freshwater fishes, arachnids, insects and freshwater invertebrates. The herbarium contains plants mainly from the Eastern Cape, and the valuable Pocock Collection of algae. The archaeological collections are representative of the Eastern Cape and include excavated assemblages from a number of sites.

Research is undertaken in the following fields: Arachnology, archaeology, entomology (taxonomy of aculeate Hymenoptera and Thysanoptera), freshwater ichthyology, freshwater invertebrates, myrmecology and history of the Eastern Cape with special emphasis on the 1820 Settlers period.

UNIVERSITY OF STELLENBOSCH

Non-university Museum

STELLENBOSCH MUSEUM

The Museum, which is one of the Cape Provincial Administration Museums, is a cultural - historical museum and was established in 1965. Research is done on architecture, furniture and household appliances with a view to well-documented exhibitions and publications.

UNIVERSITY OF THE WITWATERSRAND

University Museums

Museological collections are to be found in several of the University's departments. Among the more noteworthy are the following:

- The Archaeology Museum in the department of that name contains several hundred thousand artifacts from four million B.C. to the nineteenth century, mainly from southern Africa, but with representative items from the rest of Africa and from the other continents. Other features are permanent displays depicting the Origin of Man, and of Permanent Settlement, rock paintings and engravings. One of the largest collections of Trade Beads in the world is available for inspection.

- The Bleloch Museum in the Department of Geology contains several thousand unique and beautiful geological specimens, housed and displayed under ideal conditions.

- The Brebner Museum in the Department of Surgery contains a collection of 1413 specimens of diseased organs and tissues removed surgically from human patients.

- The Museum of the History of Medicine in the grounds of the South African Institute for Medical Research contains interesting and valuable collections depicting the history of medicine and the history of pharmacy through the ages.

- The Dental Museum in the Oral and Dental Hospital consists of two comprehensive collections, one in the Department of General Anatomy and the other in the Department of Oral Pathology. The former collection contains skulls of fish, reptiles, amphibia, mammals and primates and is intended to illustrate morphological differences in the dentitions of vertebrates.

The collection in the Department of Oral Pathology contains several hundred specimens of abnormalities of teeth, together with others covering all aspects of diseases of the oral region.

- The Hunterian Museum in the Department of Anatomy at Medical School contains an extensive collection of human and comparative anatomical specimens, X-rays, 6000 projection slides, embryological models, casts and abnormalities. Among its treasures are original ape-man and other primate fossils from Taung, Makapansgat and Sterkfontein.

- The Jokl Collection of Animal Fundi Paintings in the Department of Ophthalmology is a unique collection.
- The Moss Herbarium in the Department of Botany contains over 50 000 specimens of flowering plants, mainly from Southern Africa, with the Witwatersrand flora forming the nucleus of the collection.
- The Museum of Obstetrics and Gynaecology consists of approximately 200 carefully selected specimens illustrating gynaecological diseases and approximately 150 selected specimens illustrating conditions related to pregnancy.
- The Palaeontology Museum in the Bernard Price Institute of Palaeontology contains an extensive collection illustrating the fauna and flora of the various fossiliferous horizons in South Africa.
- The Robert Broom Museum, close to the Sterkfontein Caves near Krugersdorp, illustrates the kinds of fossils recovered from the Sterkfontein and other similar Transvaal caves, some aspects of hominid evolution, and the past and present fauna from within and around the caves.
- The Social Anthropology Museum contains approximately 1 300 items of material culture. The Fourie collection of Bushmen and S.W. African material and the Burton Luba Collection are housed in the museum and there is a representative collection for Pedi, Kgatla, Venda, Zulu and Southern Sotho.
- The Sutherland Strachan Museum is housed in the Old Medical School Building and contains over two thousand pathological specimens.
- The Museum of Wireless, Radio and Electronics is intended to exhibit equipment and components which will describe the discoveries and growth of the art of electrical communication from its genesis in the early years of the 19th century.
- The Zoology Museum was initiated in 1922 and contains a large selection of specimens. The museum serves as an integral part of the teaching carried out in the Department.

Non-university Museum in Johannesburg

SOUTH AFRICAN NATIONAL WAR MUSEUM

The museum was officially opened on 29 August 1947. Research is carried out in all military fields and the public, film companies,

students of military history, authors and journalists from all over the world are assisted by the research department.

The functions of the museum are as follows:

- To build up collections of a sufficiently high standard to attract and give researchers stimulus to open up new avenues of approach to the history of South Africa;
- to depict the achievements of the men and women of science and industry whose outstanding efforts in times of war have been of lasting benefit to South Africa in times of peace;
- to build up sufficient records pertaining to wars and conflicts in which South Africa has participated so that government departments may benefit thereby, particularly in regard to the study of causes and effects;
- to build and plan visual histories of regiments and other formations so that members and particularly new members of the regiments concerned may learn at the outset of their military training the history of their units.

The museum consists of four departments:

- The Department of History dealing with the military history of South Africa;
- a department depicting the development and growth of weapons;
- specialist collections and displays, i.e. medals, uniforms, badges, flags, colours, stamps;
- research and reference department, i.e. library, general reference section, photographs, films, maps, prints, war art, etc.

The Museum falls under the Department of National Education.

CHAPTER 9

OBSERVATORIES ATTACHED TO OR NEAR UNIVERSITIES

BLOEMFONTEIN

BOYDEN OBSERVATORY

The Boyden Observatory is operated by the Boyden Administrative Council, on which the Center for Astrophysics, Cambridge, Massachusetts; the Observatories of Belguim, Eire, Northern Ireland; and the University of the Orange Free State are represented.

Since 1968 the Boyden Observatory has been intimately associated with the Department of Astronomy of the University of the OFS where its Director holds the Chair of Astronomy.

Research comprises photographic and photoelectric photometry; spectroscopy; galactic and extra-galactic studies; sky patrol programmes; solar studies; planetary atmospheres; airglow; spectrometry.

CAPE TOWN

SOUTH AFRICAN ASTRONOMICAL OBSERVATORY

The South African Astronomical Observatory (SAAO) came into operation in January 1972. It was formed by merging the former Royal Cape Observatory, which was founded in 1820 as a southern station of the Royal Greenwich Observatory, and the former Republic Observatory in Johannesburg, which was founded in 1903 as the Transvaal Observatory.

The SAAO is administered by the CSIR as a national research institute, and it is financed jointly by the CSIR and the Science Research Council (SRC) of the United Kingdom. Some members of staff are seconded from the SRC to the CSIR. When the Radcliffe Observatory in Pretoria closed down in 1974 some of the equipment was purchased by the CSIR.

The newly-built observing station at Sutherland, Cape Province, was opened in March 1973.

A P P E N D I X

LIST OF ADDRESSES OF UNIVERSITIES

The Registrar
University of Cape Town
Private Bag
RONDEBOSCH, CAPE PROVINCE
7700

The Registrar
University of Durban-Westville
Private Bag X54001
DURBAN, NATAL
4000

The Registrar
University of Fort Hare
Private Bag X314
ALICE, CAPE PROVINCE
5700

The Registrar
University of Natal
King George V Avenue
DURBAN, NATAL
4001

or

The Registrar
University of Natal
P.O. Box 375
PIETERMARITZBURG, NATAL
3200

The Registrar
University of the North
Private Bag X5090
PIETERSBURG, TRANSSVAAL
0700

The Registrar
University of the Orange Free State
P.O. Box 339
BLOEMFONTEIN, ORANGE FREE STATE
9300

The Registrar
University of Port Elizabeth
P.O. Box 1600
PORT ELIZABETH, CAPE PROVINCE
6000

The Registrar
Potchefstroom University for Christian Higher Education
POTCHEFSTROOM, TRANSVAAL
2520

The Registrar (Academic)
University of Pretoria
Brooklyn
PRETORIA, TRANSVAAL
0181

The Registrar
Rand Afrikaans University
P.O. Box 524
JOHANNESBURG, TRANSVAAL
2000

The Registrar
Rhodes University
P.O. Box 94
GRAHAMSTOWN, CAPE PROVINCE
6140

The Registrar
University of South Africa
P.O. Box 392
PRETORIA, TRANSVAAL
0001

The Registrar
University of Stellenbosch
STELLENBOSCH, CAPE PROVINCE
7600

The Registrar
University of the Western Cape
Private Bag X17
BELLVILLE, CAPE PROVINCE
7530

The Registrar
University of the Witwatersrand
Jan Smuts Avenue
JOHANNESBURG, TRANSVAAL
2001

The Registrar
University of Zululand
KWA-DLANGEZWA, NATAL
3886

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