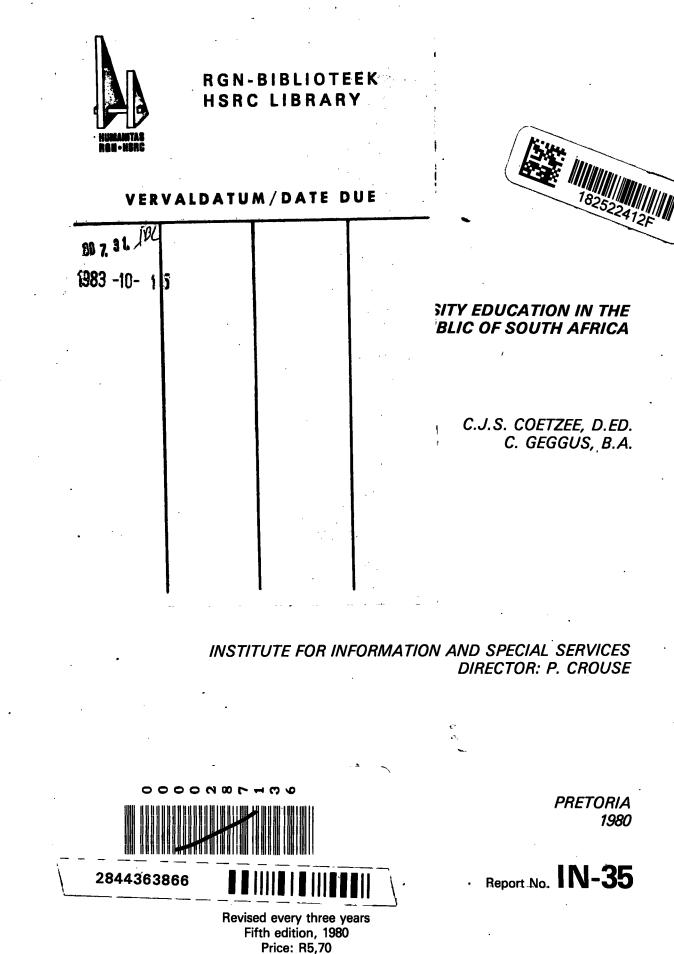
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SOUTH AFRICAN HUMAN SCIENCES RESEARCH COUNCIL



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Nirgends ist Information wichtiger als im Erziehungs- und Bildungswesen. Nur wer informiert ist, kann richtige Entscheide fällen. — A. Scherer. Schweizer Studienführer, Bern, Paul Haupt. 1977.

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PREFACE

This book is a revised version of University Education in the Republic of South Africa, which appeared in 1976.

The aim of the publication is to provide concise, authoritative and easily understand= able information on various aspects of university education for all the population groups. The data used, as obtained from university calendars and other sources, refer to the current position for 1979.

The information provided in this volume has been much in demand in other countries as well as in South Africa. The HSRC is most grateful for the assistance received from all the universities and the Joint Matriculation Board for supplying the information and trusts that the book will serve a useful purpose.

J. G. Garbers. PRESIDENT

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CHAPTER 1

DEVELOPMENT OF UNIVERSITY EDUCATION IN SOUTH AFRICA : A BRIEF REVIEW

EDUCATION IN GENERAL

Up to the first half of the 20th century education in South Africa may be said to have developed at a more or less leisurely pace, though on a sound basis. As in the case of some other countries in the Western World, the development of education in South Africa is marked by three stages. Initially, the Church took upon itself the task of education wherever this could be done. Gradually the State began to assist education financially and, in so doing, gained partial control of education. It was only towards the end of the nineteenth 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-Gene= ral of Education was appointed at the Cape. This step inaugurated a new and very sig= nificant 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 subsidised, 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.

Almost phenomenal progress has been made in the education of all population groups in the past few decades. Overwhelming proof of growth and development is evident on all educational levels, but especially with regard to, for example, numbers enrolled, faci= lities 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 pro= gressively higher standards of education.

Tables 1 and 2, on page 2, which speak for themselves, provide an overall picture of the educational development of all the population groups.

TABLE 1

ENROLMENT AT ORDINARY PRIMARY AND SECONDARY SCHOOLS

Yea	ar	Primary	Secondary	Total
		h	HITES	
967 975 Percentage	increase	528 319 562 043 6,4	244 918 329 710 34,6	773 237 891 753 15,3
		В	LACKS*	
1967 1975 Percentage	increase	2 048 386 3 033 211 48,1	185 118 464 230 150 "8	2 233 504 3 497 441 56 6
		COL	OUREDS	
1967 1975 Percentage	increase	388 607 543 858 40,0	42 142 89 831 113,2	430 749 633 689 47,1
		IN	DIANS	
1967 1975 Percentage	increase	123 303 134 793 9,3	32 735 48 485 48,1	156 038 183 278 17,5

Including Republics of Transkei and Bophuthatswana

ABLE 2

NROLMENT BY LEVEL OF EDUCATION AND AS PERCENTAGE OF POPULATION GROUP CONCERNED, 1977

E.

evel of ducation				Enro	lment			
	Whi	tes	Blac	cks**	Color	ureds	Indi	ans
	Enrol= ment*	% of popu= lation						
rimary	598	13,7	3 008	17,7	581	23,9	142	18,6
econdary	359	8,2	465	2,7	107	4,4	56	7,3
ertiary	140	3,2	28	0,3	11	0,5	10	. 1,3
OTAL	1 097	25,1	3 501	20,7	699	28,8	208	27,2

Thousands

*Republic of Transkei excluded Republic of Bophuthatswana included

UNIVERSITIES FOR WHITES

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 ad= vanced 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 Bloemfon= tein 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 Uni= versity of Stellenbosch out of the Gymnasium, later the Victoria College, Rhodes Uni= versity 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 Andrews 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 Uni= versity College, Grahamstown; Huguenot University College, Wellington; Grey Universi= ty 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 fu= ture 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. 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.

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 be= came autonomous as the University of the Witwatersrand. The Transvaal University Col= lege 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 Universi= ty 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 Re= formed Church as the Huguenot College, a training institution for social and missionary workers.

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 sur= roundings 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 Uni= versity came into being in 1967. Both these have fully justified their foundation.

UNIVERSITIES FOR BLACKS, COLOUREDS AND INDIANS

Up to the time when university facilities were created especially for them, Blacks, Col= ouredsand Indians 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 these population groups was established at the University of Natal in 1950 and in 1954 this university had just over 300 Black, Coloured and Indian students, while Rhodes had a small number of them for post-graduate work. In addition there was the University Col= lege of Fort Hare which in 1954 had under 400 students. Altogether there were fewer than 1 200 students other than Whites at residential universities in that year, while the University of South Africa had a more or less equal number of them enrolled.

Black university education started with the establishment of the South African Native College on 8 February 1916. This became a constituent college of UNISA in 1923, and was named the University College of Fort Hare. Until 1960 it was the only university col= lege specifically established for Black students. The university colleges of the North and of Zululand came into being in that year following on the Extension of University Education Act of 1959. For ten years the three colleges were under the wing of UNISA, which acted as guardian for curricula, examinations, degrees and general academic stan= dards. In 1970 the three colleges were granted autonomy and full university status.

Each university is constituted in the usual way with its own chancellor, vice-chancellor (rector), council, senate, staff and students. The staff of the university is appointed by the council, but the appointment of professors, the registrar and assistant registrars, is subject to the approval of the Minister of Education and Training. This permits the Minister to ensure that, wherever possible, consideration is given to Black academics.

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The most recent development in the provision of university training for Blacks is the establishment of the Medical University of Southern 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. It is an autonomous university governed by its own university council and is intended to offer admission to Black students of Southern Africa from any of the territories currently and previously within the bounds of the Republic of South Africa while students from neighbouring countries will also be considered. In 1978 the University commenced with a Faculty of Medicine and started training on a second-year level.

The University of the Western Cape near Cape Town, is a residential university esta= blished exclusively for the benefit of the Coloured community. It started as a university college in 1960 and obtained academic autonomy in 1970. It is financed entirely by the State which provides the campus, buildings and equipment, and pays all salaries with the result that tuition and boarding fees are kept at a most reasonable level. Fa= culties and courses are instituted in accordance with demand, whereby university educa= tion is brought within reach of a growing number of Coloured students. The biggest advance in Indian higher education came in 1961 with the establishment of the University College for Indians in Durban. In 1971 it became an autonomous univer= sity - the University of Durban-Westville. Up to the end of that year it was housed on Salisbury Island, but at the beginning of 1972 the modern well-designed campus at Chiltern Hills, Westville, about 12 km from Durban, was occupied. The multimillionrand campus on 162 ha has commanding views in all directions and allows scope for future expansion which is being planned to meet the increasing demand for university education by the Indian community.

The university college also started its work under the academic aegis of UNISA which had led practically all South Africa's universities to their academic autonomy. Under its watchful eye the university college expanded its facilities into five faculties at first, to which two more - engineering and theology - were added in 1979.

When the new dispensation for the university education of Blacks, Coloureds and Indians 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. However, apart from the very satisfactory progress that the general education and training of these population groups is making, the 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. Furthermore, recent legislation has enabled three universities for Blacks to extend their activities beyond their exist= ing campuses; a branch of Fort Hare at Umtata has now become the Transkei University, while a branch of the University of Fort Hare at Zwelitsha and a branch of the University of Zululand at Umlazi have been established.

Black, Coloured and Indian students wishing to follow courses not yet offered at their own universities may apply to study at a university for Whites and permission is usually granted.

UNIVERSITY TRAINING BY CORRESPONDENCE : UNISA

No discussion of university facilities would however be complete without reference to the extramural facilities of the University of South Africa. This University has a world-wide reputation for academic excellence. It teaches through correspondence, tu= torials and winter schools, offers a wide variety of courses, is non-residential and open to all population groups.

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 exam= inations. 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 qua= lifications, 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 5 000 students of all population groups, by 1963 over 13 000, by 1970 nearly 22 000 and by 1971 over 25 000. By 1978 the total enrolment had grown to 52 400, comprising 38 257 Whites, 7 796 Blacks, 3 927 Asians and 2 420 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 profess sors and lecturers and conducts examinations in about 700 centres in South Africa and other parts of the world.

UNIVERSITY ENROLMENT

In the last three decades university enrolment has grown rapidly. White enrolment at all residential universities was less than 20 000 in 1950, about 39 000 in 1965, 70 000 in 1975 and more than 79 000 in 1978. These numbers denote an increase of 102 per cent between 1965 and 1978. The total enrolment by 1990 is estimated at between 110 000 and 120 000. White enrolment at UNISA reveals an even higher increase - 196 per cent for the same period. Proportionally, university enrolment of the White population, is among the highest in the world. Enrolment (UNISA included) was estimated at 0,88 per cent of the White population for 1955; 1,54 for 1965; 2,3 for 1975 and 2,8 for 1978. An estimate of well over 3 per cent by 1990 appears to be quite realistic.

University enrolment of the other population groups has grown even more spectacularly than that of the Whites.

YEAR	BLACKS	COLOUREDS	INDIANS	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
1978	4 771	3 214	4 201	12 186
Increase per	· cent			
1965 - 1978	409%	724%	331%	429%

Enrolment at their residential universities increased as follows from 1961 to 1978:

The number of Black, Coloured and Indian students enrolled at UNISA is also steadily in= creasing. The following table illustrates this growth between 1965 and 1975:

YEAR	BLACKS	COLOUREDS	INDIANS	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
1978	7 796	2 420	3 927	14 143
Increase per	cent	· · · · · · · · · · · · · · · · · · ·		
1965 - 1978	402%	419%	339%	386%

Apart from enrolment at UNISA and their own universities, students from these population groups 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 :

BLACKS	COLOUREDS	INDIANS	TOTAL
145	333	747	1 225
138			1 219
167	379		1 364
314	555		1 737
504	916	1 377	2 797
cent	· · · · · · · · · · · · · · · · · · ·	······································	
247%	175%	84%	128%
	145 138 167 314 504	145 333 138 321 167 379 314 555 504 916	145 333 747 138 321 760 167 379 818 314 555 868 504 916 1 cent

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The following table shows the growth in the total university enrolment of Blacks, Coloureds and Indians between 1965 and 1978:

YEAR	BLACKS	COLOUREDS	INDIANS .	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
1978	13 071	6 550	9 505	29 126
Increase per			· · · · · · · · · · · · · · · · · · ·	
1965 - 1978	396%	450%	263%	352%

There seems to be no valid reason why the university enrolment of these groups 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 their education, particularly in the past decade, the upward trend in this field has really only started.

The total university enrolment of nearly 147 000 students in 1978, was composed as follows:

University of	White	Coloured	Asian	Black	Total
Cape Town	8 931	652	162	33	9 778
Natal	7 490	131	521	334	8 476
OFS	8 195	1	-	3	8 199
Port Elizabeth	2 897	2	-	4	2 903
Potchefstroom	6 638	2	2	6	6 648
Pretoria	16 726		·	- ,	16 726
RAU	3 792	2	2	. 1	3 797
Rhodes Stellenbosch	2 671	26	64	15	2 776
Witwatersrand	11 169	25	5	7	11 206
South Africa	10 952 38 257	75	621	101	11 749 .
•		2 420	3 927	7796 ·	<u>52</u> 400
SUB-TOTAL	117 718	3 336	5 304	8 300	134 658
Universities for					
A Blacks					•
Fort Hare	-	-	-	1 844	1 844
The North	-	-	-	1 474	1 474
Zululand	· _	-	-	1 287	1 287
MEDUNSA	-	-	-	166	166
3 Asians					
Durban-Westville	-	-	4 201	-	4 201
C Coloureds					
Western Cape	_ '	3 214	-	_	3 214
·····		<u> </u>	_		J 414
SUB-TOTAL	-	3 214	4 201	4 771	12 186

ENROLMENT AT SA UNIVERSITIES IN 1978

^{*}Occasional students included

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NIVERSITY AUTONOMY

n spite of the heavy subsidy they receive, South African universities are by no means ubservient to the State. They are autonomous within themselves and have complete 'aca= emic freedom' to teach what they think fit as they think fit in the interests of their lumni and their country. Like everyone else they have, of course, to observe the laws f the country.

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

CHAPTER 2

ADMISSION TO UNIVERSITY

THE JOINT MATRICULATION BOARD

Every education department has its own system of external Senior Certificate examina= tions (all the other school examinations are internal), but admission to university is controlled by the Joint Matriculation Board (JMB), a statutory body representing the universities and consisting, <u>inter alia</u>, of university professors from all the universi= ties and representatives of the eight education departments.

A full and official statement of the matriculation requirements of the South African universities is contained in the <u>Matriculation Examination Handbook</u> published annually by the JMB (see list of addresses). It is important to note that the prescriptions in this Handbook are altered from time to time and even from year to year. However, in order to provide a guideline, especially to immigrants and applicants from foreign coun= tries, particulars on the current position for 1979 are discussed in reasonable detail in this section.

The qualification for entrance to a course of study for a first degree at any university in South Africa is the Matriculation Certificate of the JMB for the 16 universities (in= cluding the 5 for Non-Whites), or a certificate of exemption issued by the Board. The four provincial education departments as well as the Department of National Education, the Department of Education and Training, the Department of Coloured, Rehoboth and Nama Relations and the Department of Indian Affairs conduct examinations for a senior certi= ficate based on syllabuses approved by the Board. These examinations are recognised by the Board for exemption from its own matriculation examination, subject to conditions prescribed by the Board.

A successful candidate at the matriculation examination of the JMB may be awarded either a School-leaving Certificate or a Matriculation Certificate, depending on the subjects passed, the standards attained in specific subjects and aggregate marks.

Likewise, candidates who wrote the senior certificate examinations of the various Education Departments (See Appendix II), may be awarded either a Senior Certificate or a Senior Certificate (Matriculation Exemption). The conditions for obtaining a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) are the same in both cases.

SUBJECTS

The groups of approved subjects for the Matriculation Certificate and the Senior Certificate (Matriculation Exemption) which differ from those for the School-leaving Certificate and the Senior Certificate, are as follows (H. = Higher Grade; S. = Standard Grade):

- A. Afrikaans First Language H.; Afrikaans Second Language H.; English First Language H.; English Second Language H.
- B. Mathematics H. or S.
- C. Biology H. or S.; Physical Science H. or S.
- D. French H.; German H. (First Language); German H. (3rd Language); Greek S.; Hebrew H.; Italian S.; Latin H.; Portuguese S.; Spanish S.; a Language H. selected from Kwanyama, Lozi, Ndonga, Northern Sotho, Southern Sotho, Tsonga, Tswana, Venda, Xhosa and Zulu; a Language S. selected from Northern Sotho, Southern Sotho, Tsonga, Tswana, Venda, Xhosa and Zulu.
- E. Biblical Studies H. or S.; Economics H. or S.; Geography H. or S. (if not offered under Group F); History H. or S.

F. / Accountancy H. or S.; Additional Mathematics H. (not to be taken without Mathematics H. and only by candidates presenting 7 subjects); Agricultural Science H. or S.; Art H. or S.; Business Economics S.; Commercial Mathematics S. (not to be offered with Mathematics H. or S.); Geography H. or S. (if not offered under Group E); Home Economics H. or S.; Music H. or S.; Shorthand S.; Snelskrif S.; Speech and Drama S.; Technical Drawing H. or S.; Typing S.

ADDITIONAL SUBJECTS

See APPENDIX I (p. 210) for subjects not included in the Board's list of subjects for the Matriculation Certificate which are recognised for exemption purposes when passed at other examinations.

ISSUE OF MATRICULATION CERTIFICATE

A Matriculation Certificate shall be issued to a candidate who, at one and the same examination -

- a. offered not fewer than six and not more than seven subjects, selected from Groups A to F but including a subject from each of four different groups;
- b. passed (H. = 40%; S. and second language H. = $33\frac{1}{2}$ %) in at least five subjects;
- c. obtained the minimum aggregate of 950 marks;
- d. subject to provisos (iv) and (v) below, passed -
 - . in one official First Language H. and
 - in the other official First or Second Language H.;
- e. included amongst the five subjects passed, at least one subject from each of four different groups or two subjects from Group C or Group E and one subject from each of two other groups;
- f. passed in at least three subjects H., of which, subject to provisos (iv) and (v), one shall be an official First Language H. and the other two, subject to provisos (vi) (x), shall have been selected from two of Groups B, C, D, E and F:

Provided that -

- (i) in the case of candidates offering six subjects, not more than four lan= guages shall have been offered and in the case of candidates offering seven subjects, not more than five languages shall have been offered;
- (ii) the same subjects shall not have been offered on both the Higher and the Standard Grade;
- (iii) as regards the groups -
 - (aa) Xhosa and Zulu; and
 - (bb) Northern Sotho, Southern Sotho and Tswana; not more than one language may be offered from the same group;
- (iv) only a candidate whose home language is a Bantu Language may offer a Bantu Language Higher Grade as a subject from Group A: Provided he also passes in one of Afrikaans First Language H.; Afrikaans Second Language H.; Eng=lish First Language H. and English Second Language H.: Provided further that such a candidate shall also offer the other official First Language H. or Second Language H., but need not necessarily obtain a pass mark therein: Provided further that if a candidate passes in both official languages on at least Second Language Higher Grade level and obtains at least 40% in at least one of them, the subject in which 40% has been obtained shall for purposes of prescription f. be recognised as an approved Higher Grade sub=ject from Group D: Provided further that a candidate who passes in both official languages may for the purposes of paragraph (e) above present any one of Afrikaans First Language H., Afrikaans Second Language H., English First Language H. and English Second Language H. as a subject from Group D;

- (v) only a candidate whose home language is German, who is attending a school in South-West Africa and whose parents are or were domiciled in South-West Africa, may offer German H. (Mother Tongue) as a subject from Group A, provided he also offers both Afrikaans and English, one of which shall be First Language H., and passes in both Afrikaans and English on at least Second Language Higher Grade level: Provided further that such a candidate may offer any one of Afrikaans First Language H., Afrikaans Second Language H., English First Language H. and English Second Language H. as a subject under Group D;
- (vi) any candidate offering Agricultural Science H., Accountancy H. or Technical Drawing H. for purposes of prescription f., shall pass in Mathematics on at least Standard Grade;
- (vii) any candidate offering Home Economics H. for purposes of prescription f., shall pass in Mathematics or a Natural Science on at least Standard Grade;
- (viii) except as provided for by proviso (iv) in respect of candidates whose home language is a Bantu Language, Second Official Language H. shall not be re= cognised as a Higher Grade subject for purposes of prescription f.; and
- Notie

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- (ix) Additional Mathematics H. shall under no circumstances be recognised for purposes of prescription f.
- 1. $\frac{1}{4}$ A series of prescriptions by the JMB makes provision, inter alia, for
 - completion of requirements for the Matriculation Certificate;
 - full exemption, partial exemption and conditional exemption from the Matriculation Certificate on grounds of other certificates obtained, mature age or medical or physical disability;
 - the completion of requirements of conditional exemption with a view to obtaining a Matriculation Certificate or a certificate of full exemption;
 - conversion of failures in subjects on the Higher Grade into passes in correspond= ing subjects on the Standard Grade and conversion of failures in official First Language H. or German H. (Mother Tongue) into passes in official Second Language H. or German H. (Third Language);
 - conversion of certificates of partial and conditional exemption into full exemption.
- 2. The Board has resolved that a candidate who presented the second official language S., and obtained at least 40 per cent therein and otherwise satisfied the require= ments for the completion of a Matriculation Certificate, need not repeat the full examination but only official Second Language H. and any other outstanding sub=
- 3. Although the Board's Matriculation Certificate or a certificate of exemption is the normal requirement for admission to a university, certain subjects and pass marks are prescribed by the universities as prerequisites for enrolment in some departments or faculties. Such prerequisites, which are additional to the Board's requirements, are dealt with in Chapter 4 where the fields of study at the various universities are discussed, or may be obtained direct from the universities (see list of addres=

IMMIGRANTS AND APPLICANTS FROM FOREIGN COUNTRIES

1. Issue of Matriculation Certificate to immigrants

Subject to provisions laid down by the JMB, the Board shall issue a Matriculation Cer= tificate to any immigrant who, at the time of writing the Matriculation Examination of the JMB, arrived as an immigrant in South Africa not more than five years ago, calculated from the first day of January following the date of arrival in South Africa and who, at one and the same sitting for the Matriculation Examination -

- (a) offered for the examination at least six* and not more than seven subjects selected from Groups A to F as mentioned on page 9*, but including a subject from each of four groups;
- (b) passed in at least five subjects;
- (c) obtained the minimum aggregate of 950 marks;
- (d) included amongst the five subjects passed a subject from each of four different groups or two subjects from Group C or Group E and one subject from each of two other groups;
- (e) passed in at least three subjects on the Higher Grade of which, subject to para=// graph (f) below, one shall be an official First Language H. and the other two, subject to provisos (vi), (vii), (viii), (ix) and (x) shall be selected from two// of Groups B, C, D, E and F;
- (f) passed in -
 - (i) one of the official First Languages H. and
 - (ii) the other official First or Second Language H. or another language selecte/d from Group D: Provided that a pass in the home language of such an immigr ant at Advanced Level for the General Certificate of Education shall be accept = ed in lieu of a pass in an official First Language H. and such an immigrant shall then be required to pass in one of the official First Languages H. ()r official Second Languages H.: Provided further that in the case of a German immigrant, German H. (Mother Tongue) shall be accepted in lieu of an official First Language H. under the same conditions as a language on Advanced Level of the General Certificate of Education: Provided further that a language offered in lieu of an official First or Second Language H. in terms of this prescription, shall up to the examination of March 1980 be deemed to be a subject from Group D and from the examination of Nov./Dec. 1980, as a subject from Group A.

*See Note 2, p. 11.

- 2. Full exemption on the grounds of the General Certificate of Education and the Higher School Certificate of the examining bodies mentioned in Appendix III
- (1) Subject to the provisions of paragraph (2) below, the JMB shall issue a certificate of full exemption to any person who has passed the examination for the General Cer= tificate of Education or the Higher School Certificate of the examining bodies mentioned in Appendix III: Provided that such person -
 - (a) at one or more sittings for the examination obtained a pass mark as deter= mined by the examining body in a minimum of either five subjects* approved by the JMB, of which at least two shall be approved Advanced level subjects and the remainder approved Ordinary level subjects, or four approved subjects, of which three shall be approved Advanced level subjects and the remaining subject any approved Ordinary level subject; and
 - (b) included in the four or five subjects at least one subject selected from each of the following groups:
 - (i) Group I: English Language;
 - (ii) Group II: Afrikaans, French, German, Greek, Hebrew, Italian, Latin, Nederlands, Portuguese or any other language approved by the JMB;
 - (iii) Group III: Biology, Botany, Chemistry, French (if not offered under Group II), General Science, Geology, German (if not offered under

Group II), Greek (if not offered under Group II), Hebrew (if not offered under Group II), Italian (if not offered under Group II), Latin (if not offered under Group II), Mathematics, Physics, Physics with Chemistry, Portuguese (if not offered under Group II), and Zoo= logy or any other language approved by the JMB: Provided further that in the case of Ordinary level subjects passed in or after June 1975, only symbols A to C shall be recognised as pass marks by the JMB.

- (2) For exemption purposes -
 - (a) a Credit at the Cambridge Overseas School Certificate Examination shall be deemed to be a pass at Ordinary level of the General Certificate of Education;
 - (b) a Subsidiary level pass at the Higher School Certificate Examination shall be deemed to be a pass at Ordinary level of the General Certificate of Education;
 - (c) a mark of 42 per cent to 44 per cent of the maximum marks in an M-level examination of the Associated Examining Board mentioned in Appendix III, shall be deemed to be a pass at Ordinary level of the General Certificate of Education;
 - (d) a Principal level pass at the Higher School Certificate Examination shall be deemed to be a pass at Advanced level of the General Certificate of Educa= tion; and
 - (e) a first-year degree course of a South African university in the subject concerned leading unconditionally to a second degree course in the relevant subject or another first-year degree course approved by the JMB, shall be deemed to be a pass at Advanced level of the General Certificate of Education.
- *The list of recognised subjects is determined from time to time by the JMB in consul= tation with the examining body and is obtainable on application from the Secretary of the Board.
- 3. Full exemption on the grounds of the M-level examination of the Associated Examining Board mentioned in Appendix III
- (1) Subject to the provisions of paragraph 2(2) above and sub-paragraphs (2) and (3) of this paragraph, the JMB shall issue a certificate of full exemption to any person who has passed the M-level examination of the Associated Examining Board mentioned in Appendix III: Provided that such person obtained the pass mark as determined by the Associated Examining Board in -
 - (a) a minimum of five M-level subjects* or a combination of four M-level subjects and one Ordinary level subject or, in the case of an M-level examination written in November 1972 or thereafter, a combination of three M-level subjects and two Ordinary level subjects approved by the JMB;
 - (b) at least one subject selected from each of the following groups:
 - (i) Group I: English Language;
 - (ii) Group II: Afrikaans, French, German, Greek, Hebrew, Italian, Latin, Nederlands, Portuguese or any other language approved by the JMB;
 - (iii) Group III: Biology, Botany, Chemistry, French (if not offered under Group II), General Science, Geology, German (if not offered under Group II), Greek (if not offered under Group II), Hebrew (if not of= fered under Group II), Italian (if not offered under Group II), Latin (if not offered under Group II), Mathematics, Physics, Physics with Chemistry, Portuguese (if not offered under Group II), Zoology or any other language approved by the JMB;
 - (iv) Group IV: Any other subject from Group II or Mathematics (if not offered under Group III) or one of Economics, Economic Geography, Economic History, Geography, History and Religious Knowledge:

Provided further that for the purpose of satisfying the grouping requirements mentioned in sub-paragraph 1(b), not more than two Ordinary level subjects shall be recognised: Provided further that in the case of Ordinary level subjects passed in or after June 1975 only symbols A to C shall be recognised as pass marks by the JMB.

- (2) (a) Full-time candidates shall satisfy all the requirements of sub-paragraph 1(a) and (b) at not more than three sittings for the examination.
 - (b) Part-time candidates shall satisfy the M-level requirements of sub-paragraph 1(a) at not more than three sittings for the examination and shall pass in at least two M-level subjects at the first sitting for the examination.
- (3) For the purposes of sub-paragraph (2)(a) and (b) a sitting for the examination in June and a sitting in December of the same year or a sitting in December and a sitting in the following June, shall be deemed to be one sitting for such exami= nation.
- *The list of recognised subjects is determined from time to time by the JMB in consul= tation with the examining body and is obtainable on application from the Secretary of the Board.
- 4. Full exemption on the grounds of the certificates mentioned in Appendix I! issued by other examining bodies outside the Republic of South Africa

The JMB shall issue a certificate of full exemption to any person from any country other than the Republic of South Africa or South-West Africa provided such person is in possession of a certificate which entitles the holder to unconditional ad= mission as a candidate for a degree or diploma approved by the JMB of a university or other institution in the country of origin approved by the JMB and provided the subjects which he passed at the approved examination include a subject selected from Group A and three subjects selected from three of Groups B to E. See p. 9.

5. Full exemption to immigrants on the grounds of South African school examinations mentioned in Appendix II

Subject to provisions laid down by the JMB the Board shall issue a certificate of full exemption to any immigrant who, at the time of writing any examination mentioned in Appendices I and II conducted by the education department concerned or by a school approved by the JMB on the recommendation of such department, arrived as an immigrant in South Africa not more than five years ago, calculated from the first day of January following the date of arrival in South Africa:

Provided that such person -

- (a) offered a minimum of six* and a maximum of seven subjects at one and the same sit= ting for the examination;
- (b) selected the subjects which were offered from the subjects mentioned on page 9* as supplemented by the additional subjects for the examination concerned mentioned in Appendix I but including a subject from each of four different groups;
- (c) satisfied all the requirements of paragraph 3 bis (b), (d), (e) and (f); and
- (d) obtained the minimum aggregate as prescribed in Appendix II.

*See Note 2, p.11.

6. Partial exemption on the grounds of the examinations of the examining bodies mentioned in Appendix III

Subject to the provisions of paragraph 2 above the JMB shall issue a certificate of partial exemption to any person who has, at one or more of the examinations mentioned in Appendix III, obtained the pass mark as determined by the examining

body in each of a minimum of such four Ordinary level and Advanced level subjects as the JMB may approve but who failed to satisfy one or more of the requirements as laid down in paragraph 2(1)(a) and (b): Provided that in the case of Ordinary level subjects passed in or after June 1975, only symbols A to C shall be recognised as pass marks by the JMB.

7. Partial exemption on the grounds of the M-level examination of the Associated Examining Board mentioned in Appendix III

Subject to the provisions of paragraphs 2(2), 3(2) and (3) above, the JMB shall issue a certificate of partial exemption to any person who has, at an M-level examination of the Associated Examining Board, obtained the pass mark as determined by the above-mentioned body in each of a minimum of such four Ordinary level and M-level subjects or a combination of Ordinary level and M-level subjects as the JMB may approve but who failed to satisfy one or more of the requirements as laid down in paragraphs 3(1)(a) and (b): Provided that in the case of Ordinary level subjects passed in or after June 1975, only symbols A to C shall be recognised as pass marks by the JMB.

8. Partial exemption on the grounds of the certificates mentioned in Appendix IV

Subject to provisions laid down by the JMB, the Board shall issue a certificate of partial exemption to any person who is in possession of one of the certificates mentioned in Appendix IV, if that certificate entitles him to unconditional ad= mission as a candidate for a degree or diploma approved by the JMB of a university or institution in the country of origin approved by the JMB but the subjects which such person passed at the approved examination do not include all the compulsory groups of subjects as prescribed by paragraph 4 above.

9. Partial exemption to immigrants on the grounds of the School-leaving Certificate Examination of the Matriculation Board and the South African school examinations mentioned in Appendix II

Subject to the provisions laid down by the JMB, the Board shall issue a certificate of partial exemption to any immigrant who, at the time of writing the Schoolleaving Certificate Examination of the Board or any of the examinations mentioned in Appendix II, arrived as an immigrant in South Africa not more than five years ago, calculated from the first day of January following the date of arrival in South Africa and who -

- (a) presented at least six* and not more than seven subjects selected from Groups A -F on page 9* as supplemented by the additional subjects for the respective examination mentioned in Appendix I at one and the same sitting for the examination;
- (b) passed in at least five subjects;
- (c) in the case of a School-leaving Certificate of the JMB, obtained the minimum aggregate of 950 marks and, in the case of the examinations mentioned in Appendix II, the minimum aggregate as indicated in the above-mentioned Appendix; and
- (d) passed in two of the three subjects on the Higher Grade as required by paragraph 1(e) above.

*See Note 2, p. 11.

10. Conditional exemption on the grounds of the General Certificate of Education and the Higher School Certificate of the examining bodies mentioned in Appendix III

Subject to provisions laid down by the JMB, the Board shall issue a certificate of conditional exemption to any person who has, for a certificate mentioned in Appendix III, obtained the pass mark as determined by the examining body concerned in a minimum of such four Ordinary and Advanced level subjects as the JMB may approve: Provided that such person -

- (a) passed at least one approved Advanced level subject and in addition satisfied all the requirements of paragraph 2(1)(b); or
- (b) passed at least two approved Advanced level subjects and any subject from each of two of the three groups as prescribed by paragraph 2(1)(b); or
- (c) passed any subject from each of the three groups as prescribed by paragraph 2(1)
 (b) but lacks a pass mark in a fifth subject as required by paragraph 2(1)(a): Provided further that in the case of Ordinary level subjects passed in or after June 1975, only symbols A to C shall be recognised.
- 11. Conditional exemption on the grounds of the M-level Examination of the Associated Examining Board mentioned in Appendix III
- (1) Subject to the provisions laid down by the JMB, the Board shall issue a certificate of conditional exemption to any person who has offered a minimum of four M-level subjects or, in the case of an M-level examination written in November 1972 or thereafter, a minimum of M-level subjects for an examination of the Associated Examining Board and obtained the pass mark as determined by the above-mentioned body in such four M-level subjects or three M-level subjects and one Ordinary level subject or, in the case of an M-level examination written in November 1972 or thereafter, a minimum of three M-level subjects and one Ordinary level subject or, in the case of an M-level subjects and one Ordinary level subject or two M-level subjects and two Ordinary level subjects as the JMB may approve:

Provided that such person -

- (a) satisfied all the requirements of paragraph 3(1)(b) above but passed only three of the required four M-level subjects or, in the case of an M-level examination written in November 1972 or thereafter, passed only two of the re= quired three M-level subjects;
- (b) passed at least four M-level subjects or, in the case of an M-level examination written in November 1972 or thereafter, at least three M-level subjects but lacks a pass mark in a subject from Groups I to IV as prescribed by para= graph 3(1)(b); or
- (c) passed four M-level subjects, or in the case of an M-level examination written in November 1972 or thereafter, three M-level subjects and one Ordinary level subject which satisfy all the requirements of paragraph 3(1)(b) but lacks a pass mark in a fifth subject as required by paragraph 3(1)(a): Provided fur= ther that in the case of Ordinary level subjects passed in or after June 1975, only symbols A to C shall be recognised as pass marks by the JMB.
- (2) A full-time candidate shall not be entitled to conditional exemption if the qua= lifications on the grounds of which he would have qualified for conditional exemp= tion in terms of provisions laid down by the Board were attained at more than two sittings for the examination and a part-time candidate shall not be eligible for conditional exemption if the M-level qualifications on the grounds of which he would have qualified for conditional exemption were attained at more than two sittings for the examination and exemption were attained at more than two have qualified for conditional exemption were attained at more than two sittings
- (3) Any person to whom conditional exemption has been granted and who lacks a pass in another Ordinary level subject may satisfy the outstanding requirement by obtain= ing a pass in the relevant subject at the Higher or Standard Grade at the Matri= culation Examination of the JMB or at any of the examinations mentioned in Appen= dix II or obtain a pass mark at a South African university in a degree examination for a qualifying degree course in the respective subject.

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(4) Any person to whom conditional exemption has been granted and who lacks a pass in another M-level subject may satisfy the outstanding requirement by obtaining a pass in the relevant subject at Higher Grade at the Matriculation Examination of the JMB or at any of the examinations mentioned in Appendix II or obtain a pass mark at a South African university in a first course leading unconditionally to a se= cond course in the respective subject.

12. Conditional exemption to applicants from foreign countries

Subject to provisions laid down by the JMB, the Board shall, irrespective of the subjects taken for the qualifying examination, issue a certificate of conditional exemption to the registrar of any South African university on behalf of an applia cant from any country other than the Republic of South Africa or South-West Africa, if such person holds a certificate entitling him to unconditional admission as a candidate for a degree or diploma approved by the JMB, of a university or other institution in the country of origin approved by the JMB.

13. Conditional exemption to immigrants

- (1) Subject to provisions laid down by the JMB, the Board shall issue a certificate of conditional exemption to any immigrant who, at the time of writing the Matricula= tion Examination or the School Leaving Certificate Examination of the JMB or any of the examinations mentioned in Appendix II, arrived as an immigrant in South Africa not more than five years ago, calculated from the first day of January fol= lowing the date of arrival in South Africa: Provided that such person at one and the same sitting for the examination -
 - (a) offered for the examination at least six* and not more than seven subjects selected from Groups A to F as mentioned in paragraph 2*;
 - (b) passed in at least five subjects;
 - (c) obtained the minimum aggregate as prescribed for the relevant examination;
 - (d) obtained at least $33\frac{1}{2}$ per cent in one of the official First Languages H. and
 - (e) satisfied all the requirements of paragraphs (e) and (f) on page 10.
- (2) Subject to provisions laid down, the JMB shall issue a certificate of conditional exemption to any immigrant who passed a technical or other examination of the Department of National Education other than the National Senior Certificate Exam= ination, and desires to register immediately as a matriculated student at a South African university: Provided that such person -
 - (a) obtained at least 40 per cent in each of at least four subjects of at least National Technical Certificate Part V or T.2 level;
 - (b) included Mathematics amongst such four subjects;
 - (c) obtained at least $33\frac{1}{3}$ per cent in one of the official First Languages Higher Grade at the Matriculation Examination or at an examination mentioned in Appendix II.
- (3) A pass in the home language of such an immigrant at Advanced level of the General Certificate of Education shall be accepted in lieu of a pass in an official First Language H. and such an immigrant shall then be required to pass in one of the official languages, First Language H. or Second Language H. before a bachelor's degree is conferred on him. In the case of a German immigrant, German H. (Mother Tongue) shall be accepted in lieu of a pass in an official First Language H. under the same conditions as a language on Advanced Level of the General Certificate of Education.

*See Note 2, p. 11.

CHAPTER 3

THE UNIVERSITIES OF SOUTH AFRICA

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 Universities for

Blacks

The Medical University of Southern Africa - Medunsa University of Fort Hare University of the North University of Zululand

Coloureds

University of the Western Cape

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 Muniqi= pality 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 1950 a long cherished ideal was realised 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.

Faculties and Departments : 1979

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 Animal Physiology and Animal Diseases; Biometry; Dairy Science ; Genetics; Pasture Science; Plant Pathology; Small Stock Science; Soil Science.

FACULTY OF ARTS

Afrikaans and Nederlands; Anthropology; Applied Anthropology; Bantu Languages; Biblical Studies; Communication; Dramatic Art and Theatrical Art; English; French; General Lin= guistics; General Literary Theory; 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, Auditing and Income Tax; Business Economics; Economics; State and Municipal Administration; Industrial Psychology; Subdepartment : Money and Banking; Transport Economics; Typing and Snelskrif (Shorthand).

FACULTY OF EDUCATION AND THE TEACHERS' COLLEGE

Faculty of Education

Didactical Pedagogics; Educational Psychology; Historical and Comparative Education; Philosophy of Education.

Teachers' College

Afrikaans; Art; Audio-visual Education; Education; English; General Science; Geography and History; Mathematics; Physical Education; Religious Instruction; Woodwork.

FACULTY OF LAW

Constitutional Law and Philosophy of Law; Criminal Law and International Law; Mercan= tile Law; Private Law; Procedural Law; Roman Law and History of Law.

FACULTY OF MEDICINE

Anaesthetics; Anatomical Pathology; Anatomy; Biophysics; Cardio-Thoracic Surgery; Che= mical Pathology; Community Health; Critical Care; Dermatology; Diagnostic Radiology; Forensic Medicine; Haematology; Hospital Dietetics; Internal Medicine; Microbiology (Medical); Neurology; Neurosurgery; Nuclear Medicine; Obstetrics and Gynaecology; Occu= pational Therapy; Oncotherapy; Ophthalmology; Orthopaedics; Paediatrics; Pharmacology; Physiology; Physiotherapy; Primary Medical Care; Psychiatry; Surgery; Subdepartment : Bio-engineering.

FACULTY OF SCIENCE

Applied Mathematics; Architecture; Astronomy; Biochemistry; Botany; Chemistry; Genetics; Geology, Geochemistry, Geohydrology and Hydrology; Home Economics; Mathematical Statis= tics, Statistics and Computer Science/Business Data Processing; Mathematics; Micro= biology; Physics; Quantity Surveying/Building Administration; Town and Regional Plan= ning; Zoology - Entomology.

FACULTY OF SOCIAL SCIENCES

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

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 Burgers= dorp, 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 : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

Afrikaans-Nederlands; Anthropology; Bantu Languages; Biblical Studies; Communication and Journalism; Cultural Science; Development Administration; English; French and Ita= lian; Fine Arts; General Linguistics and Literary Theory; Geography; German; Greek; History; History of Art; International Politics; Latin; Library and Information Science; Music; Nursing; Philosophy, Ethics; Theory of Science; 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; Theory of Science.

FACULTY OF EDUCATION

Education: Didactics and Tertiary Education, Empirical, Guidance and Special Education, Historical and Comparative Education, Teaching Practice, Theoretical; Physical Educa= tion; Theory of Science.

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 Science; Electrotechnics; Engineering Chemis= try; Geography; Geology; Home Economics and Dietetics; Mathematics and Applied Mathema= tics; Microbiology and Hygiene, Natural Sciences - Course III; Pedology; Pharmaceutics and Pharmaceutical Chemistry; Pharmacology; Physics; Physiology; Psychology; Statistics; Theory of Science; Zoology.

FACULTY OF THEOLOGY

Apologetics, Ethics; Dogmatological Subjects; Ecclesiastical Law, Ecclesiastical His= tory; Missiology; New Testament Subjects; Old Testament Subjects; Official Subjects.

UNIVERSITY OF PRETORIA

<u>A Brief History</u>

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: 1979

FACULTIES

Agricultural Sciences, Arts, Dentistry, Economic and Political Sciences, Education, Engineering, Law, Mathematics and Science, Medicine, Theology (Division A), Theology (Division B), Veterinary Science.

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURAL SCIENCES

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; Fine Arts; Geography; German; Greek; History; History of Art; Latin; Librarianship; Mathematics; Music; Phi= losophy; Physical Education; Political Science, Public Administration and International Politics; Psychology; Romance Languages; Roman-Dutch and International Private Law; Roman Law and Jurisprudence; Semitic Languages; Social Work; Sociology; Speech Science, Logopedics and Audiology; Statistics.

FACULTY OF DENTISTRY

Community 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 La= bour Law; Political Science, Public Administration and International Politics; Statis= tics.

FACULTY OF EDUCATION

Didactical Pedagogics and Subject Didactics; Fundamental Pedagogics; Historical and Com= parative Pedagogics; Orthopedagogics; Physical Education; Psychological, Sociological and Vocational Orientation Pedagogics.

FACULTY OF ENGINEERING

Agricultural Engineering; Chemical Engineering; Civil Engineering; Electrical Engineer= ing; Electronic Engineering; Materials Science and Metallurgical Engineering; Mechanical Engineering; Mining Engineering; Production Engineering; Surveying and Town and Regional Planning.

FACULTY OF LAW

Bantu Law; Constitutional, Administrative and International Law; Criminal Law; Mercan= tile and Labour Law; Procedural Law and Law of Evidence; Roman-Dutch Law and Interna= tional 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); Computer Science;

Entomology; Geography; Genetics; Geology; Home Economics and Dietetics; Mathematics; Physics; Physiology; Quantity Surveying; Statistics; Zoology.

FACULTY OF MEDICINE

Anaesthetics; Anatomy; Cancer Chemotherapy; Chemical Pathology; 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; Radiodiagnosis; Radiotherapy; Surgery.

FACULTY OF THEOLOGY (DIVISION 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.

FACULTY OF THEOLOGY (DIVISION 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.

RAND AFRIKAANS UNIVERSITY

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 36 Afrikaans-medium high schools and 33 English-medium high schools. Thus 40% of the total Afrikaans-speak= ing 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 Afrikaansspeaking 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 : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

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

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

Accounting; Business Economics; Economics; Industrial Psychology; 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 and Electronic Engineer= ing; Experimental and Theoretical Physics; Geography; Geology; Mathematics; Mechanical and Civil Engineering; Statistics; Zoology.

UNIVERSITY OF STELLENBOSCH

<u>A Brief History</u>

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 : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURE

Agricultural Economics; Agronomy and Pasture Science; Animal Science; Biochemistry; Bio= metry; Enology; Entomology; Food Science; Genetics; Horticulture; Human and Animal Phy= siology; Microbiology and Virology; Plant Pathology; Poultry Science; Sheep and Wool Science; Soil Science and Agricultural Hydrology; Viticulture.

FACULTY OF ARTS

African Studies; Afrikaans Cultural Science and Folklore; Afrikaans en Nederlands; An= thropology; Archaeology; Bantu Languages; Biblical Studies; Development Administration; Drama; English; Fine Art; French; General Linguistics; Geography; German; Greek; History; Italian; Journalism; 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; In= dustrial Psychology; Mercantile Law; Political Science and Public Administration; Short= hand and Typing; Statistics; Transport Economics.

FACULTY OF DENTISTRY

Community Dentistry; Conservative Dentistry; Dental Prosthetics; Maxillo, Facial and Oral Surgery; Oral Biology; Oral Medicine and Periodontology; Oral Pathology; Ortho= dontics; Röntgenology.

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; Physical Education; School Art; School Music.

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FACULTY OF ENGINEERING

Applied Mathematics; Chemical Engineering (including the branch of Metallurgical Engi= neering); Civil Engineering; Electrical Engineering (including specialisations in Heavy current, Low-tension current and Marine Electrical Engineering); Mechanical Engineering (including specialisations in Machine Construction; Aeronautical, Automobile, Marine, Production and Refrigeration Engineering).

FACULTY OF FORESTRY

Nature Conservation; Silviculture; Wood Science.

FACULTY OF LAW

Private Law and Mercantile Law; Public Law.

FACULTY OF MEDICINE

Anaesthetics; Anatomical Pathology; Anatomy; Cardio-Thoracic Surgery; Chemical Patholo= gy; Clinical Psychology; Comprehensive Medicine; Dermatology; Didactics - Medical Science; Forensic Medicine; Haematology; Hospital Dietetics; Internal Medicine; Medical Microbiology; Medical Physiology and Biochemistry; Medical Social Work; Neurosurgery; Nursing; Obstetrics and Gynaecology; Occupational Therapy; Ophthalmology; Orthopaedics; Otorhinolaryngology; Paediatrics; Pharmacology; Physiotherapy; Plastic Surgery; Psy= chiatry; Radiology; Surgery (general); Urology; Virology.

FACULTY OF MILITARY SCIENCE

Accounting (Mil.) and Auditing (Mil.); Aeronautics; Business Economics (Mil.); Chemistry (Mil.); Economics (Mil.); Geography (Mil.); Mathematics (Mil.); Mercantile Law (Mil.) and

ilitary Law; Military History; Naval Navigation; Physics (Mil.); Political Science Mil.) and Public Administration (Mil.).

ACULTY OF SCIENCE

iochemistry; Botany; Chemistry; Computer Science; Geology; Home Economics; Human and nimal Physiology; Mathematics; Physics; Zoology.

ACULTY OF THEOLOGY

iaconiological Subjects; Dogmatological Subjects; Ecclesiological Subjects; Missiology; ew Testament Subjects; Old Testament Subjects.

ENGLISH-MEDIUM UNIVERSITIES

NIVERSITY OF CAPE TOWN

Brief History

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

The South African College was founded in 1829 as a private venture by the churches and sitizens 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-ma= triculation years to the SA 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 ori= ginated), the formation of the Students' Representative Council, and finally the in= corporation 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 SA College of Mu= sic and the Cape Town Schools of Fine Art and of Architecture.

In 1918 the University had some 600 students. The present enrolment is more than 9 700. Buildings and facilities are constantly being expanded and improved to keep pace with the growing number of students and their requirements.

<u> Faculties and Departments : 1979</u>

FACULTIES

Arts, Commerce, Education, Engineering, Fine Art and Architecture, Law, Medicine, Mu= sic, Science, Social Science.

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

African Languages; Afrikaans en Nederlands; Anthropology; Archaeology; Classics; Cultu= ral History of Western Europe; English Language and Literature; German Language and Literature; Hebrew Studies; History; School of Librarianship; Philosophy; Political Science; Religious Studies; <u>Romance Studies</u>: French Language and Literature, Italian Language and Literature; Speech Training and Dramatic Art; <u>School of Economics</u>: Division of Economic History, Research Division.

FACULTY OF COMMERCE

1

Accounting; Business Science; Graduate School of Business.

FACULTY OF EDUCATION

FACULTY OF ENGINEERING

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

FACULTY OF FINE ART AND ARCHITECTURE

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

FACULTY OF LAW

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

FACULTY OF MEDICINE

Anaesthetics; Anatomy; Bacteriology; Biomedical Engineering; Cardiac Surgery; Chemical Pathology; Clinical Science and Immunology; Community Health; Dermatology; Forensic Medicine and Toxicology; Haematology; Infectious Diseases; Medical Physics; Medicine; Neurology; Neuro-Surgery; Nuclear Medicine; Obstetrics and Gynaecology; Ophthalmology; Oral and Dental Surgery; Orthopaedic Surgery; Otorhinolaryngology; Paediatrics and Child Health; Pathology; Pathological Laboratories; Pharmacology; Physical Medicine; Physio= logy and Medical Biochemistry; Plastic Surgery and Maxillo-facial Surgery; Psychiatry; Radiodiagnosis; Radiotherapy; <u>Surgery</u>: General Surgery, Paediatric Surgery, Thoracic Surgery; Urology.

Paramedical Departments: Logopaedics; Occupational Therapy; Physiotherapy; Nursing Tuition.

FACULTY OF MUSIC

1

College of Music; School of Ballet.

FACULTY OF SCIENCE

Organic Chemistry;

<u>School of Chemical Sciences</u>: Inorganic Chemistry, Physical Chemistry, Theoretical Chemistry;

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

School of Life Sciences: Biochemistry, Botany, Microbiology, Zoology;

<u>School of Mathematical Sciences</u>: Applied Mathematics, Computer Science, Mathematical Statistics, Mathematics;

School of Physical Sciences: Astronomy, Physics, Oceanography.

FACULTY OF SOCIAL SCIENCE

Applied Sociology in Social Work; Psychology; Public Administration; Sociology; School of Social Work.

UNIVERSITY OF NATAL

A Brief History

A University College Bill was promulgated 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. The courses led to the intermediate and final B.A. examinations in Arts and Science of the University of the Cape of Good Hope. On 2 April 1918 the Natal University College became a constituent college of the Universi= ty of South Africa.

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 Uni= versity 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 class ses 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 be= came the University of Natal in terms of Act No. 4 of 1948, with campuses in Pieter= maritzburg and Durban.

Faculties and Departments : 1979

FACULTIES

Agriculture, Architecture and Allied Disciplines, Arts, Commerce, Education, Engineer= ing, 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; Crop Science; Dietetics and Home Economics; Entomology; Genetics; Horti= cultural Science; Microbiology and Plant Pathology; Pasture Science; Soil Science and Agrometeorology; Statistics and Biometry.

FACULTY OF ARCHITECTURE AND ALLIED DISCIPLINES

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

FACULTY OF ARTS

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

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FACULTY OF COMMERCE

Accountancy; Business Administration.

FACULTY OF EDUCATION

Education; Educational Psychology.

FACULTY OF ENGINEERING

Agricultural Engineering; Chemical Engineering; Civil Engineering; Electrical Engineer= ing; Mechanical Engineering; Surveying.

FACULTY OF LAW

Law; Private Law; Public Law.

FACULTY 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: Haematology; Medicine : <u>Sub-Departments</u> : Cardiology; Dermatology; Physical Medicine;

Microbiology; Neuro-Surgery; Ophthalmology; Orthopaedic Surgery; Otorhinolaryngology; Paediatrics and Child Health; Physiology; Psychiatry; Radiology; Surgery : <u>Sub-Departments</u> : Paediatric Surgery; Plastic and Reconstructive Surgery; Thoracic Surgery; Urology; Virology;

University Diploma in Nursing Education.

FACULTY OF SCIENCE

Biochemistry; Biological Sciences; Botany; Chemistry and Chemical Technology; Computer Science; Entomology; Geography; Geology and Mineralogy; Mathematical Statistics; Mathe= matics and Applied Mathematics; Physics; Psychology; Statistics and Biometry; Zoology.

FACULTY OF SOCIAL ST DE

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<u>A Brief Hist</u>

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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.

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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 : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

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

FACULTY OF COMMERCE

Accounting; Business Administration; Economics and Economic History; Geography; Law; Mathematical Statistics; Mathematics (Pure).

FACULTY OF DIVINITY

Divinity

FACULTY OF EDUCATION

Education

FACULTY OF LAW

Law

FACULTY OF SCIENCE

Chemistry; Computer Science and Applied Mathematics; Geography; Geology; Mathematical Statistics; Mathematics (Pure); Microbiology; School of Pharmaceutical Sciences; Phy=sics; Plant Science; Psychology; Zoology and Entomology.

FACULTY OF SOCIAL SCIENCE

Anthropology; Economics and Economic History; Philosophy; Political Studies; Psycholo= gy; Social Work; Sociology.

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 Insti= tute 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 class ses commenced in 1917.

In July 1919 the first medical courses were offered and in 1920 Parliament passed legis= lation providing for the establishment of the "University College, Johannesburg". Dur= ing 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 Uni= versity buildings have increased greatly in number. Student enrolment has increased steadily from 1 106 in 1923 to 11 749 in 1978.

Faculties and Departments : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARCHITECTURE

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

FACULTY OF ARTS

African Languages; Afrikaans and Nederlands; Applied Mathematics; Archaeology; Biblio= graphy, Librarianship and Typography; Classics; Divinity; School of Dramatic Art; Eco= nomic 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; School of Psychology; Romance Studies (French, Italian, Portuguese); Russian Studies; Social Anthropology; Sociology; School of Social Work; Speech Pathology and Audiology.

FACULTY OF BUSINESS ADMINISTRATION

Graduate School of Business Administration.

FACULTY OF COMMERCE

Accounting; Business Economics; Economic History; Economics.

FACULTY OF DENTISTRY

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

FACULTY OF EDUCATION

Education.

FACULTY OF ENGINEERING

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

FACULTY OF LAW

School of Law

FACULTY OF MEDICINE

Anaesthesia; Anatomy; Community Medicine; Experimental and Clinical Pharmacology; Forensic Medicine; Human Genetics; Medical Biochemistry; Medical Physics; Medicine; Nuclear Medicine; Nursing Education; Obstetrics and Gynaecology; Ophthalmology; Ortho= paedic Surgery; Paediatrics; Pathology (Anatomical); Pathology (Haematological); Pathology (Immunological); Pathology (Microbiological); Pathology (Virological); Physiology; Psychiatry and Mental Hygiene; Radiology (Diagnostic); Radiology (Thera= peutic); Surgery.

Sub-departments: Occupational Therapy; Physiotherapy.

FACULTY OF SCIENCE

Anatomy; Applied Mathematics; Archaeology; Biochemistry; Botany and Microbiology; Che= mistry; General Anatomy; General Physiology; Genetics; Geography and Environmental Stu= dies; Geology; Geophysics; Mathematics; Physics; Physiology; Psychology; Zoology.

DUAL-MEDIUM UNIVERSITY

UNIVERSITY OF PORT ELIZABETH

<u>A Brief History</u>

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

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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 2 903 in 1978.

Early in 1970 building operations began on the new Summerstrand campus, donated to the University by the City Council of Port Elizabeth. The new campus was officially in= augurated on 23 August 1975.

The first development phase of the University is expected to reach completion by the end of 1979.

Faculties and Subject Committees : 1979

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; Nguni and Sotho Languages; Nursing Science; Philosophy; Political Science; Psy= chology; Public Administration; Semitica; Social Work, Sociology.

FACULTY OF ECONOMIC SCIENCES

Accountancy; Architectural subjects; Building Management; Building Science subjects; Business Economics; Economics and Economic History; Industrial and Organizational Psy= chology; Quantity Surveying subjects; Town and Regional Planning subjects.

FACULTY OF EDUCATION

Didactical Pedagogics; Didactics of Tertiary Education; Fundamental Pedagogics; Physi= cal Education; 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; Mate= rials Science; Mathematics; Mathematical Statistics; Physics; Textile Science subjects; Zoology.

BOTH MEDIA

UNIVERSITY OF SOUTH AFRICA

<u>A Brief History</u>

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 examina= tions hitherto held by the Board were replaced by examinations for the degrees of Mas= ter 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 inde= pendent charters were granted to the Victoria College, Stellenbosch, and the South Afri= can 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: Grey University College, Bloemfontein; Huguenot University College, Wellington; Natal University College, Pietermaritzburg; Rhodes Uni= versity College, Grahamstown; Transvaal University College, Pretoria; 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 Uni= versity 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 pro=vide tuition to external students through the medium of the written word. This function has become its main activity.

Faculties and Departments : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

African Languages (Ndonga (SWA), Northern Sotho, Southern Sotho, Tsonga, Tswana, Venda, Xhosa, Zulu); Afrikaans en Nederlands; Anthropology and Indigenous Law; Classics; Com= munication; Criminology; Development Administration and Politics; English; Geography; German; History; History of Art and Fine Arts; Library Science; Linguistics; Musicolo= gy; Nursing Science; Philosophy; Political Science and Public Administration; Psycholo= gy; Romance Languages (French, Italian, Portuguese, Spanish); Russian; Semitics; Social Work; Sociology.

FACULTY OF COMMERCE AND ADMINISTRATION.

Accounting; Applied Accountancy; Auditing; Business Economics; Economics; Industrial Psychology; School for Business Leadership.

FACULTY OF EDUCATION

Didactics and Comparative Education; Empirical Education; Fundamental Pedagogics; His= tory of Education; Orthopedagogics.

FACULTY OF LAW

Constitutional and International Law; Criminal and Procedural Law; Legal History, Com= parative 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; Old and New Testament; Systematic Theology, Theological Ethics and Practical Theology.

UNIVERSITIES FOR BLACKS

THE MEDICAL UNIVERSITY OF SOUTHERN AFRICA-MEDUNSA

A Brief History

Following an investigation of the need to establish a medical university for the Blacks in Southern Africa, the Government decided in principle, on 24 August 1966, to set up such a university in the Transvaal. The decision to establish the university north-west of Pretoria was prompted by the following factors:

- It was found that 47 per cent of all Black students, who had thus far graduated in Medicine, originated from the Transvaal and bordering territories.
- The existing Ga-Rankuwa Hospital could serve as the training centre.
- The proximity of the Faculties of Medicine of the Universities of Pretoria and the Witwatersrand could provide guidance and assistance in the establishment and deve= lopment of the Medical Faculty of the new university.

In August 1976 the Medical University of Southern Africa Act (Act No. 78 of 1976) was passed by Parliament by which the university was established, enabling it to offer train= ing in Medicine, Dentistry and Veterinary Science.

Building operations were expedited and the first residence and the Basic Medical Scien= ces Building became available for use in 1978.

The University is situated near Ga-Rankuwa, about 31 kilometres northwest of Pretoria on the main road to Brits.

Students who have complied with the minimum requirements for the first year of study are eligible for admission to M.B., Ch.B.II.

The Faculties of Dentistry and Veterinary Science will follow in due course.

Faculty and Departments : 1979

FACULTY

Medicine

ACADEMIC DEPARTMENTS

Anaesthetics, Anatomical Pathology, Anatomy, Chemical Pathology, Clinical Genetics, Family Medicine, Forensic Medicine, Gynaecology and Obstetrics, Haematology, Immunology, Internal Medicine, Microbiology, Paediatrics, Pharmacology, Physiology, Preventive and Promotive Medicine, Psychiatry, Radiodiagnosis, Radiotherapy, Surgery.

There are also seventeen Sub-Departments.

UNIVERSITY OF FORT HARE

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 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, one hundred kilometres away. This association was most valuable to Fort Hare.

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 (now the Department of Education and Training) with effect from 1 January 1960. 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.

The University of Fort Hare caters specifically for the Xhosa-speaking group.

In terms of the University of Fort Hare Act (Act No. 40 of 1969) university status was granted to the University College of Fort Hare and provided for the autonomous admini= stration and control of the affairs of the University and for the regulation of its activities and matters incidental thereto. As from 1 January 1970 the University Col= lege became known as the University of Fort Hare.

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.

Branch of the University at Zwelitsha

The Council of the University, at the request of the Government of the Ciskei, has es= tablished the nucleus of a branch of the University at Zwelitsha in King William's Town.

The following courses of study will be offered at the University's branch as from the

commencement of the 1979 academic year:

Xhosa, English, Afrikaans-Nederlands, Mathematics, History, Private Law, Political Science, Public Administration, Economics, Business Economics, Accounting, Industrial Psychology.

The courses/lectures will be given after normal working hours.

Faculties and Departments : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF AGRICULTURE

Agricultural Economics; Agricultural Engineering; Agricultural Extension and Rural De= velopment; Agronomy (Sub-departments : Crop Science and Pasture Science); Animal Science (Sub-departments : Anatomy and Physiology, Animal Health, Dairy Science and Technology, Poultry Science, Sheep and Wool Science); Genetics and Plant Protection; Soil Science.

FACULTY OF ARTS

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

FACULTY OF ECONOMIC SCIENCES

Accountancy; Business Economics and Co-operative Work; Economics; Industrial Psycholo= gy.

FACULTY OF EDUCATION

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

FACULTY OF LAW

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

FACULTY OF SCIENCE

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

FACULTY OF THEOLOGY

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

UNIVERSITY OF THE NORTH

<u>A Brief History</u>

Towards the middle of the nineteen-fifties it was felt that the number of university in= stitutions catering for Non-Whites should be extended, and thus the Extension of Univer= sity Education Act (Act No. 45 of 1959) was passed to provide for the establishment of two additional university colleges for Blacks. one for 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 com= munities. Although existing primarily for the above-mentioned ethnic groups, the insti= tution 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 thirty kilometres from Pietersburg, in a pic= turesque part of Lebowa, the land of the Northern Sotho. 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 labo= ratories have been erected to date, as well as a number of residences providing commo= dious accommodation to students.

Student numbers, which stood at only 87 in 1960, had grown to 1 474 by 1978.

In 1962 three degrees were awarded at the first graduation ceremony. This number grew to 198 in 1978. The University of the North is at present the largest university for Blacks in the Republic of South Africa.

Faculties and Departments : 1979

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; Geo= graphy; German; History; Linguistics and Literary Studies; Mathematics; Northern Sotho; Philosophy; Physical Education; Political Science; Private Law; Psychology; Public Admi= nistration; Social Work; Sociology and Criminology; Southern Sotho; Tsonga; Tswana; Venda.

FACULTY 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.

FACULTY OF EDUCATION

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

FACULTY OF LAW

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

FACULTY OF, MATHEMATICS AND NATURAL SCIENCES

Applied Mathematics; Botany; Chemistry; Computer Science; Geography; Geology; Mathema= tics; Mathematical Statistics; Nursing; Optometry (Professional Section); Pharmaceutical Chemistry; Pharmaceutics and Pharmaceutical Technology; Pharmacology; Physics; Physio= logy; Psychology; Zoology and Biology.

FACULTY OF THEOLOGY

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

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 uni= versity 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 acade= mic 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.

One of the University's tasks is the training of public servants for the emerging Black Homelands. The Institute for Public Service and Vocational Training which was esta= blished in 1974, offers comprehensive in-service training to students from all parts of the country.

The University has as one of its major tasks the rendering of a service to developing communities. It is consequently much concerned with development research and under= takes projects such as that which is currently investigating the possibilities of fish culture in fresh water lakes and lagoons.

Evening classes in certain first year B.A. courses are offered by the University at the Umlazi Vocational and Technical High School.

Faculties and Departments : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

Afrikaans; Anthropology and Development Studies; Bantu Languages; Biblical Studies; Classics; Communication Science; Criminology; English; Geography; German; History; Li= brary Science; Music; Philosophy; Psychology; Social Work; Sociology.

FACULTY OF ECONOMIC AND POLITICAL SCIENCES

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

FACULTY OF EDUCATION

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

FACULTY OF LAW

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

FACULTY OF SCIENCE

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

FACULTY OF THEOLOGY

Church History; Diaconiology and Ecclesiastical Subjects; Dogmatics and Ethics; New Tes= tament; Old Testament; Science of Mission and Science of Religion.

INSTITUTE FOR PUBLIC SERVICE AND VOCATIONAL TRAINING

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

UNIVERSITY FOR COLOUREDS

UNIVERSITY OF THE WESTERN CAPE

<u>A Brief History</u>

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 effi= ciently 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 build= ings have been erected and planning is well under way for other buildings and for ex= tensions 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, con= duct its own examinations and award its own degrees.

Faculties and Departments: 1979

FACULTIES

Arts and Philosophy, Dentistry, Economic and Management Sciences, Education, Law, Science, Theology.

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ACADEMIC DEPARTMENTS

FACULTY OF ARTS AND PHILOSOPHY

Afrikaans en Nederlands; Anthropology; Biblical Studies; English; French; (incorporat= ed in the Department of Latin); Geography; Geology (incorporated in the Department of Geography); German; Hellenistic Greek; History; Human Ecology; Industrial Psychology; Latin; Library Science; Linguistics; Music; Nursing; Philosophy; Psychology; Semitic Languages, Social Work; Sociology; Xhosa (incorporated in the Department of Anthropo= logy).

FACULTY OF DENTISTRY

Anatomy; Community Dentistry; Conservative Dentistry; Dental Prosthetics; Dental Science; Medical Microbiology; Oral Medicine and Periodontics; Oral Surgery and Roentgenology; Pathological Anatomy and Oral Pathology; Physiological Sciences.

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

Accounting; Business Economics (includes Typing, Shorthand, Snelskrif); Economics; In= dustrial Psychology; Public Administration and Political Science; Mathematical Statis= tics.

FACULTY OF EDUCATION

Didactics and Administration; Empirical Pedagogy; Fundamental Pedagogy; Historical Pedagogy; Sociopedagogy.

FACULTY OF LAW

Comparative Law and International Law; Mercantile Law; Private Law; Public Law.

FACULTY OF SCIENCE

Applied Mathematics; Botany; Chemistry; Geography; Geology (incorporated in the Depart= ment of Geography); Mathematical Statistics; Mathematics; Pharmaceutical Chemistry; Pharmaceutics; Pharmacology (including Health Education); Physics; Zoology.

FACULTY OF THEOLOGY

Diaconiology; Ecclesiastical History; New Testament; Old Testament; Missiology; Syste= matic Theology.

UNIVERSITY FOR INDIANS

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UNIVERSITY OF DURBAN-WESTVILLE

<u>A Brief History</u>

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 Uni= versity College the status of a university which sets its own examinations and confers its own degrees.

Faculties and Departments : 1979

FACULTIES

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

ACADEMIC DEPARTMENTS

FACULTY OF ARTS

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

FACULTY OF COMMERCE AND ADMINISTRATION

Accounting and Auditing; Business Administration; Business Economics; Economics; Indus= trial Psychology; Public Administration; Statistics.

FACULTY OF EDUCATION

Empirical, Special and Remedial Education : Divisions : Empirical Education; Special and Remedial Education; Logopedics and Speech Therapy; Science Education; Home Econo= mics;

History of Education, Comparative Education and Educational Administration : Division : Mathematical Education;

<u>Methodology of Education and Educational Technology</u> : <u>Divisions</u> : General Method; Lang= uage Studies; Speech Training;

Philosophy and Sociology of Education : Divisions : Commercial Education; Social Stu= dies; Practice Teaching;

Physical Education : Divisions : Art Education; Music.

FACULTY OF ENGINEERING

FACULTY OF LAW

Mercantile Law; Private Law; Public Law.

FACULTY OF SCIENCE

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

FACULTY OF THEOLOGY

CHAPTER 4

FIELDS OF STUDY AT UNIVERSITIES AND QUALIFI= CATIONS THAT CAN BE OBTAINED

Note: In this chapter all the degrees, diplomas and certificates are mentioned but in most cases only the first degrees, diplomas and certificates are discussed.

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
MEDUNSA	-	Medical University of South Africa
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
RU	-	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

POST-GRADUATE DEGREES

Honours degree

After obtaining a Bachelor's degree a student may be admitted to the degree of Bachelor with Honours after one year of full-time study or two years of part-time study in one of the major subjects taken for the Bachelor's degree.

The Honours examination consists of such written papers and such practical, oral and other tests as may be prescribed.

Master's degree

Normally, only students holding an Honours degree will be accepted as candidates for Master's degrees. Students holding a Bachelor's degree will be accepted only in excep= tional cases.

In certain fields of study no Honours degree study is offered. Some universities may also regard some Bachelor's degrees as equivalent to an Honours degree.

Paramedical courses offered by MEDUNSA

Diploma in Dental Therapy: Dip. Dent. Ther.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with passes in Mathematics, Physical Science and/or Biology.

Duration: Three years. One year of full-time study and two years of inservice training.

Diploma in Diagnostic Radiography: Dip. Rad.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with passes in Mathematics and at least one science subject. Applicants must be at least 17 years of age and be physically fit.

Duration: Three years divided between study at Medunsa and practical work at Ga-Rankuwa Hospital.

Diploma in Dietetics: Dip. Diet.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with passes in Mathematics, English and at least one science subject.

<u>Duration</u>: Three years of full-time study. Candidates must do at least five months' practical vacation work in a hospital under a qualified dietician or nutritionist. They are also required to obtain a certificate in Home Nursing and First Aid.

Diploma in Occupational Therapy: Dip. 0. Ther.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Certificate) with at least one of the following subjects: Mathematics, Physi= cal Science, Biology.

Duration: Three years of full-time study.

Diploma in Physiotherapy: Dip. Phys.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with Mathematics, Physical Science and/or Biology. Candidates must be of good physique (not obviously overweight) and must be interested in the medical field and in human relationships.

<u>Duration</u>: Three years. Throughout the course students are employed as student physiotherapists on the staff of Ga-Rankuwa Hospital to gain the necessary practical experience. A candidate for a Master's degree must be a registered student for at least one year, during which time he has to undertake advanced study, or an approved research project, or both, under the guidance of a supervisor or study leader appointed by the Senate of the university concerned.

The examination usually consists of a dissertation showing acquaintance with the methods of research, or of written papers, or both, as the Senate may prescribe. In some fields of study e.g. Fine Art, Architecture, Music, the rules for the Master's degree may provide for other forms of examination.

Doctor's degrees

<u>Doctor of Philosophy - Ph.D.</u>: A candidate must be a graduate and be registered as a student for at least two years. He will be required, under the direction of a supervisor, to pursue an approved course of special study or research on some subject falling with= in the scope of studies represented in the university. He must submit a thesis embody= ing the results of his special study or research. No thesis shall be accepted which does not make a distinct contribution to the knowledge or understanding of the subject and which does not afford evidence of originality shown either by the discovery of new facts or by the exercise of independent critical power.

Other Doctor's degrees: A candidate who already holds a Master's or a Ph.D. degree is required to undertake advanced original research and must present for the approval of the Senate original work in an approved field. The work, which must have been published, must constitute a distinguished contribution to the advancement of knowledge in that field.

FIELDS OF STUDY

ACCOUNTANCY/ACCOUNTING

Universities: All the universities in the Republic of South Africa

Note: 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.

FIRST DEGREES

Bachelor of Commerce and Certificate in the Theory of Accountancy: B.Com., C.T.A. (UCT)

Admission: As for the B.Com. degree. See p. 64.

Duration: Three years of full-time study for the B.Com. degree and one additional year of full-time study for the C.T.A., after which the candidate has to serve articles of clerkship with an accountant. The C.T.A. may also be completed on a part-time basis while the candidate serves articles.

A candidate may also take the B.Com. (Hons.) degree in Accounting concurrently with the C.T.A. curriculum over a period of four years of full-time study and serve articles of clerkship thereafter.

Bachelor of Accountancy: B.Acc. (UDW, UN)

Admission: As for the B.Com degree. See p.64.

Duration

Durban-Westville: Three years of full-time study followed by two years of part-time study or six years of part-time study.

Natal: Four years of full-time study or five years of part-time study.

Baccalaureus Rationis: B.R. (UNorth)

Admission: As for the B.Com. degree. See p. 64.

Duration: Four years of full-time study. A candidate has to obtain the B.R. (Hons.) degree which extends over one year of full-time study in order to qualify as a chartered accountant.

Baccalaureus Computationis: B. Compt. (UOFS)

Admission: As for the B.Com. degree. See p. 64.

Duration: Four years of full-time study. To qualify as a chartered accountant a can= didate has to obtain the B.Compt. Hons. degree, the curriculum for which is similar to that of the C.T.A. (see p. 46).

Baccalaureus Rationalium: B.R. (PU for CHE)

Admission: An approved Bachelor's degree which includes the following courses: Account= ancy III, Auditing II, Mercantile Law II, Cost Accounting II, Income Tax I.

Duration: Two years of part-time study.

This degree admits the candidate to the qualifying examination set by the Public Account= ants' and Auditors' Board.

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B. Com. (Accounting) - C.T.A. (RAU)

Admission: As for the B.Com. degree. See p. 65.

Duration: Five years of part-time study.

Bachelor of Accounting Science: B.Compt. (UNISA)

Admission: As for the B.Com. degree. See p. 65.

Duration: 4 years.

Honours Bachelor of Accounting Science: Hons.B.Compt. (UNISA)

Admission: A B.Compt. degree or another degree with Accounting IV, Information Systems (or another approved course in information systems or data processing), Income Tax, Auditing II and Commercial Law III.

Duration: At least one year.

This degree admits candidates to the aforementioned Board's examinations.

Bachelor of Accounting : B. Accounting (US)

Admission: As for the B.Com. degree. See p. 65.

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

Honours Bachelor of Accounting : B. Accounting Hons. (US)

Admission: The B.Accounting degree.

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

This degree entitles the candidate to write the qualifying examination set by the Pu= blic Accountants' and Auditors' Board.

Baccalaureus Commercii (Accounting) and the Certificate in the Theory of Accounting : B.Com. - C.T.A. (Combined) (UWC)

Admission: As for the B.Com. degree. See p.65.

Duration: Six years of part-time study.

Bachelor of Accountancy : B.Acc. (UW)

Admission: As for the B.Com. degree. See p. 65. A holder of a C.T.A. may also be ad= mitted.

Duration: At least five years of part-time study.

This degree meets the requirements of the Public Accountants' and Auditors' Board.

At the University of Fort Hare a candidate may take the B.Com. (Accounting) degree (see p. 64) and thereafter the B.Com.(Hons.) degree in Accounting as a part-time student over two academic years.

Note: Accountancy is also offered as an option for the B.Com. degree by various univer= sities. See list of fields of study, p. 65.

HONOURS DEGREES

Bachelor of Commerce (Honours) : B.Com.(Hons.) (UCT, UFH) Baccalaureus Rationis cum Honoribus : B.R. Hons. (UNorth) Honneursbaccalaureus Computationis : B.Compt. Hons. (UOFS) Honours Bachelor of Economic and Management Sciences : B.Com.Hons. (RAU) Honours Bachelor of Accounting Science : Hons. B.Compt. (UNISA) Honours Bachelor of Accounting : B.Accounting Hons. (US) Honours Baccalaureus Commercii : B.Com.Hons. (UWC)

MASTER'S DEGREES

Master of Commerce : M.Com. (UCT, UFH, UW) Master of Accountancy : M.Acc. (UN) Magister Computationis : M.Compt. (UOFS) Master of Economic and Management Sciences : M.Com. (RAU) Master of Accounting Science : M.Compt. (UNISA) Master of Accounting : M.Accounting (US) Magister Commercii : M.Com. (UWC)

DOCTOR'S DEGREES

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

Doctor Computationis : D.Compt. (UOFS)

Doctor of Economic and Management Sciences : D.Com. (RAU)

Doctor of Accounting Science : D. Compt. (UNISA)

Doctor of Accounting : D. Accounting (US)

Doctor Commercii : D.Com. (UWC)

CERTIFICATE AND DIPLOMAS

Certificate in the Theory of Accountancy: C.T.A.

Cape Town

Admission: As for the B.Com. degree. No person shall be registered as a candidate for the Certificate unless he has produced evidence that he has either served or is serving or is about to serve under articles registered with the Public Accountants' and Auditors' Board.

Duration: Four years of part-time study. The Senate may exempt a candidate from such course or courses on the ground of credits obtained in equivalent courses while regis= tered for a degree, or a diploma or a certificate.

Orange Free State

Admission: A B.Compt. degree or the candidate must have fulfilled the subject require= ments of this degree.

Duration: The following three courses have to be completed: Accounting, Auditing, In= come Tax. Persons who hold the degree of B.Compt. or B.Com. may obtain the degree of B.Compt.(Hons.) or B.Com.(Hons.) through this study provided that they submit an article which can be published.

Port Elizabeth

Admission: A B.Com. (Accountancy) degree or any other approved Bachelor's degree provided that the Senate may in such a case prescribe a special curriculum.

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

A candidate who qualifies for the B.Com.Hons. degree in Accountancy Subjects obtains the C.T.A. simultaneously, provided that he has complied with all the requirements for obtaining the Certificate.

Pretoria

The C.T.A. will be awarded to graduates who have passed a number of prescribed courses. Where applicable courses taken for the B.Com.(Hons.)(Accountancy) degree will be re= cognised for the C.T.A.

Rhodes

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass in Mathematics.

Duration: Four years of full-time study.

South Africa

The C.T.A. may be taken only by students who have already obtained credits towards the Certificate. Students who are registered as articled clerks with the Public Accoun= tants' and Auditors' Board and wish to qualify for admission to the Board's examinations, must complete the B.Compt. and the Hons.B.Compt. degrees. See p. 44.

Western Cape

Admission: As for the B.Com. degree. See p.65. This Certificate may only be taken by articled clerks or persons who have completed their articles.

Duration: Five years.

Advanced Diploma in Management Accounting: Adv.Dip.Mgt.A. (UCT)

Admission: A person who holds a degree or an approved professional qualification and/ or several years of approved business experience.

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

Diploma in Accountancy (UDW)

Admission: As for the B.Acc. degree. See p. 43.

Duration: As for the B.Acc. degree.

Curriculum: As for the B.Acc. degree. This Diploma is intended for students who are registered with or are intending to be registered with the Public Accountants' and Auditors' Board as articled clerks.

Diploma in Accountancy : Dip.Acc. (UN)

Admission: A graduate who has obtained credit in nine or more courses for the B.Com. degree.

Duration: One year.

Diploma in Cost Accounting (PU for CHE)

Admission: The B.Comm. degree with Accounting III, Cost Accounting II, Income Tax I; or the National Diploma for Cost Accountants; or the candidate must be an associate mem= ber of the SA Institute of Chartered Secretaries and Administrators.

Duration: Two years. The Diploma will only be awarded to candidates who have had two years' approved practical experience.

Higher Diploma in Accountancy: H.Dip.Acc. (UW)

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. (UZ)

The D.T.A. may be issued to a student who has completed the degree of Hons.B.Com. (Ac= counting and Auditing) and is registered as an articled clerk with the Public Account= ants' and Auditors' Board or has completed his articled clerkship.

Diploma in State Finance and Auditing (a) General or (b) Local Government (UZ)

Admission: A Senior Certificate.

Duration: Three years of full-time study. This Diploma is offered in the University's Institute for Public Service and Vocational Training.

ADMINISTRATION/PUBLIC ADMINISTRATION

Universities: Cape Town, Durban-Westville, Fort Hare, North, Orange Free State, Port Elizabeth, Pretoria, South Africa, Stellenbosch, Western Cape, Zululand

FIRST DEGREES

Baccalaureus Administrationis: B.Admin. (UDW, UWC)

Bachelor of Administration: B.Admin. (UFH, UNorth, UZ)

Admission: As for the B.Com. degree. See p. 64.

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

The University of Fort Hare offers two options, viz: Public Affairs and Personnel Manage= ment.

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Baccalaureus Administrationis : B.Admin. (UOFS)

Bachelor of Administration: B.Admin. (US)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

The University of Stellenbosch requires a pass in Mathematics on the Standard Grade should Mathematics (half course) and Statistics (half course) be included.

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

Bachelor of Public Administration: B.Admin. (UP)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass on the Higher Grade in at least two of the following subjects: Economics, History, Geography, Biology or Physiology, Biblical Studies, Physical Science, Mathe= matics and a third language: Provided that a language offered on the Standard Grade only, will be recognised for this purpose.

A pass in Mathematics on the Higher Grade or 40 per cent on the Standard Grade is re= quired for certain courses, e.g. Business Economics II, Economics II, Accounting or Statistics.

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

HONOURS DEGREES

Honours Bachelor of Public Administration : B. in Public Administration Hons. (US)

Admission: A Bachelor's degree. A candidate must have gained such practical experience in public administration to serve as adequate preparation for the Honours course.

Duration: Two years of extramural study.

Honoris Baccalaureus Administrationis: B.Admin.Hons. (UDW)

Bachelor of Administration (Honours): B.Admin.(Hons.) (UFH)

Honours Bachelor of Administration : B.Admin.Hons. (UNorth, US) or Hons. B.Admin. (UZ) Honneursbaccalaureus Administrationis: B.Admin.(Hons.) (UOFS)

Bachelor of Public Administration Honours: B.Admin.(Hons.) (UP)

MASTER'S DEGREES

Master of Public Administration : M.Pub.Ad. (UCT)

Admission: An Honours degree in the Faculty of Social Science of the University or an equivalent Honours degree of any university.

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

Master in Public Administration: M.P.A. (UOFS, UPE)

Admission: A Bachelor's degree and adequate administrative experience.

Duration: Two years.

Master of State and Urban Administration : M.S.A. (UP)

Admission: A Bachelor's degree; at least three years' practical experience, preferably in the public sector; and credits for Public Administration III, Economics I and Poli= tical Science I.

Duration: At least two years and not more than four years.

Master of Administration : M.Admin. (UNISA)

Admission: A Bachelor's degree; at least three years' appropriate practical experience, preferably in the public sector; and credits for Public Administration III and for at least two courses in one or more of the following subjects: Economics, Industrial Psy= chology, African Development Administration, Political Science.

Duration: The curriculum consists of three parts. Part III consists of a dissertation of limited scope on an approved topic from any of the subjects taken for parts I and II.

Magister Administrationis : M.Admin. (UDW, UOFS) Master of Administration : M. Admin. (UFH, UNorth, US, UZ) Master of Public Administration : M. Admin. (UP)

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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) or D.P.A. (US)

DIPLOMAS

Diploma in Public Administration (UDW)

<u>Admission</u>: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Duration: Two years of full-time study.

Diploma in State and Municipal Administration (UOFS)

Admission: A Senior Certificate.

Duration: Three years of full-time study.

The curriculum is identical with the curriculum of the B.Admin. degree, except that all the courses in Municipal Administration must be taken.

Advanced Diploma in State and Municipal Administration (UOFS)

Admission: Diploma in State and Municipal Administration or extensive experience which may be regarded as adequate to undertake the study profitably.

Duration: The curriculum is identical with the B.Admin.(Hons.) degree plus an essay.

Diploma in Advanced Public Administration : Dip. P.A. (UPE)

Admission: A Senior Certificate or equivalent and adequate administrative experience.

Duration: At least one year.

Diploma in Public Administration : Dipl. Public Admin. (UNorth)

Admission: A Senior Certificate. Selection in consultation with government services.

Duration: Three years.

Diploma in Advanced Public Administration (UP)

Admission: A Senior Certificate and adequate experience.

Duration: At least two years and not more than four years.

Advanced Diploma in Public Administration (US)

Admission: A Senior Certificate and practical experience in public administration.

Duration: Two years of part-time study.

Diploma in Local Government and Administration* (UZ)

Admission: A Senior Certificate.

Duration: Three years.

Diploma in Organisation and Method Study* (UZ)

Admission: A Senior Certificate.

Duration: Three years.

Diploma in Public Administration* (UZ)

Admission: A Senior Certificate.

Duration: Three years.

*These diplomas are offered in the University's Institute for Public Service and Voca= tional Training.

AGRICULTURE

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

FIRST DEGREES

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

B.Sc. in Agriculture (US)

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

Admission: Matriculation Certificate or a Senior 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 Stan= dard Grade in both Mathematics and a natural science subject.

Orange Free State: A pass in Mathematics on the Standard Grade. It is strongly recommended that prospective students take Physical Science, and if possible, Biology as well for the Std 10 examination.

Pretoria: As for the B.Sc. degree. See p. 135.

Stellenbosch: A pass in Mathematics and a science subject on the Standard Grade. See also admission requirements for the B.Sc. degree p.136.

Duration: Four years of full-time study.

FIELDS OF STUDY

A student selects his curriculum from one of the following fields of study:

Agricultural Economics: All the universities Agricultural Production: UN. US Agro-meteorology: UN, UOFS Agronomy or Crop Science: UN, UOFS Agronomy and Pasture Science: US Animal Physiology: US Animal Production: UP Animal Production Science: UFH Animal Science: UN, UOFS, US Biochemistry: UN, UOFS, UP, US Biometry: UN, UOFS, US Crop Science or Agronomy: UN. UOFS Crop Science and Horticultural Science: UFH Crop Science and Land Use: UFH Crop Science and Soil Science: UFH Dairy Science: UOFS Dairy Technology: UP Enology and Viticulture: US Entomology: UN, UOFS, US Food Science: US (See also p. 100) Genetics: UN, UOFS, US Horticultural Science: UN, UP Hortology: US Land and Water Use Development: UFH Microbiology: UN, UOFS, UP, US Pasture Science: UN, UOFS Plant Pathology: UN, UOFS, UP, US Plant Production: UP Poultry Science: UN Small Stock Science: UOFS Soil Science: UFH, UN, UOFS, US Soil Science and Plant Nutrition: UP

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Orange Free State: It is strongly recommended that prospective students take Biology for the Std 10 examination.

Duration: Three years of full-time study.

Bachelor of Pedagogics: B.Ped. (UFH)

Admission: As for the B.A. degree. See p. 55.

Duration: Four years of full-time study. See EDUCATION p. 79.

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

<u>Admission</u>: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Additional requirements:

Pretoria: Pass marks in Mathematics and in Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade.

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

Duration: Four years of full-time study.

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

Admission: Matriculation Certificate or a Senior 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: B. Agricultural Management (US)

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

Duration: Three years of full-time study.

HONOURS DEGREES

Bachelor of Science in Agriculture (Honours) B.Sc.Agric.(Hons.) (UFH, UOFS) Bachelor of Agriculture (Honours): B.Sc. (Agric.) (Hons.) (UP) Honours Bachelor of Science in Agriculture: B.Sc. Agric. Hons. (US) Bachelor of Agricultural Management (Honours) : B.Agric.Mgt.Hons. (UN) Honours Bachelor of Agricultural Management: B.Agricultural Management Hons. (US) Bachelor of Agricultural Extension (Honours): B.Agric.Ext. (Hons.) (UFH) Baccalaureus Honores Institutionis Agrariae: B.Inst.Agrar.(Hons.) (UP)

MASTER'S DEGREES

Master of Science in Agriculture: M.Sc.Agric. (UFH, UN, UOFS, US)
Master of Agriculture: M.Agric. (UOFS)
Master of Agriculture: M.Sc.Agric. (UP)
Master of Agricultural Extension: M.Agric.Ext. (UFH)
Magister Institutionis Agrariae: M.Inst. Agrar. (UP)
Master of Agricultural Management: M.Agric.Mgt. (UN) or M. Agricultural Management (US)

DOCTOR'S DEGREES

Doctor of Science in Agriculture: D.Sc.Agric. (UFH, UN, US) Doctor of Philosophy: Ph.D. (UN, UOFS) Doctor of Science: D.Sc. (UOFS) Doctor of Agriculture: D.Sc.(Agric.) (UP) Doctor Institutionis Agrariae: D.Inst. Agrar. (UP) -Doctor of Philosophy (Agriculture): Ph.D. (Agriculture) (US) Doctor of Philosophy (Agricultural Management): Ph.D. (Agricultural Management) (US)

> R. M

ANIMAL NURSING

University: Pretoria

DIPLOMA

Diploma in Animal Nursing

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with pass marks in Mathematics and Physical Science or Biology of at least 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade. Only women students are admitted.

Duration: Two years of full-time study.

ARCHITEC TURE

Universities: Cape Town, Natal, Orange Free State, Port Elizabeth, Pretoria, Witwaters=

FIRST DEGREE

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

Admission: Matriculation Certificate or a Senior 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: A pass in Mathematics of at least 40 per cent on the Higher Grade or 50 per cent on the Standard Grade.

Orange Free State: As for the B.Sc. degree. See p. 135.

Port Elizabeth: A pass in Mathematics of at least 40 per cent on the Standard Grade. A candidate may be required to pass a special entrance examination.

Pretoria: A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade, as well as a pass in Physical Science on the Higher Grade or at least 40 per cent on the Standard Grade.

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

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

POST-GRADUATE DEGREES

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)

ARTS

Universities: All the universities in the Republic of South Africa

FIRST DEGREE

Bachelor of Arts : B.A. or

Baccalaureus Artium : B.A.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

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, Histo= ry, Geography, Music, Biblical Studies, Economics, Art, Physiology.
- 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: Passes in both the official languages on the Higher Grade together with a mini= mum of 40 per cent in at least three subjects on the Higher Grade, one of which must be the First Language.

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

- French IB: A pass in French on the Higher or the Standard Grade
- German I: A pass in German (third language) on the Higher Grade or a pass in German on the Higher Grade (mother-tongue)
- Latin I: A pass in Latin on the Higher or the Standard Grade
- Mathematics I, Applied Mathematics or Statistical Methods I : A pass of at least 40 per cent in Mathematics on 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, Biblical Studies, Economics, Biology or Physiology, Physical Science, a third language: Provided that a pass in a third language on the Standard Grade may be accepted if it is offered on the Stan= dard Grade only.
- A candidate may not be admitted to the English IA course unless he has obtained at least 50 per cent in English on the Standard Grade or a pass in English on the Higher Grade.
- A candidate may not be admitted to the French IA course unless he has passed French in the Matriculation or Standard 10 examination or has passed in French IB.

- A candidate may not be admitted to the German IA course unless he has obtained a pass in German in the Matriculation or Standard 10 examination or has passed in German IB.

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 a pass in the special course in the language concerned at the University.
- Mathematics: A pass of at least 40 per cent on the Higher Grade. Candidates who have passed Mathematics on the Standard Grade will only in exceptional cases be admitted to the course in Mathematics after a test set by the Department of Mathematics has been passed.

Rhodes:

- Introductory courses may be taken in Latin, Greek, Hellenistic Greek, French, German, Hebrew, Italian and the African languages where candidates have not matriculated in these subjects. 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.
- A candidate may not take any course in English, Afrikaans or Afrikaans/Nederlands unless he has obtained a matriculation pass in that subject in either First or Se= cond Language Higher Grade.

South Africa: For admission to a first degree course in any language except English, Afrikaans, Hellenistic Greek and Arabic a pass is required in the corresponding language either on the Higher Grade or 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.

Western Cape:

- Afrikaans en Nederlands I and Afrikaans: A pass in Afrikaans First or Second Language Higher Grade.
- English I and English Special: A pass in English First or Second Language Higher Grade.
- German I: A pass of at least 40 per cent on the Higher Grade in German (Third Lan= guage).
- Latin I: A pass in Latin on the Higher Grade.
- Mathematics I and Economics II: A pass in Mathematics on the Higher Grade or at least 40 per cent on the Standard Grade.
- Music I: A Grade IV Certificate (practical and theory) of the University of South Africa or an equivalent qualification.

Witwatersrand: A pass on the Higher Grade in three of the following subjects: Afrikaans First Language, Art*, Bantu Language, Biology, English First Language, French, Geography, German, Hebrew, History, Latin, Mathematics, Music**, Physical Science, Physiology.

*Only for admission as a candidate for the degree of B.A. in Fine Arts.

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

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

See Appendix V (p.214) for list of major subjects for B.A. (General) offered in the Faculty of Arts by the various universities.

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HONOURS DEGREES

Bachelor of Arts (Honours): B.A. (Hons.) (UCT, UFH, UP) or B.A. Hons. (UN)
Honoris Baccalaureus Artium: B.A. Hons. (UDW)
Bachelor of Arts Honours : B.A. Hons. (UNorth)
Bachelor of Arts with Honours : B.A. (Hons.) (UOFS, RU) or B.A. Hons. (RAU, UW)
Baccalaureus Artium Honores: B.A. Hons. (UPE)
Honours Bachelor of Arts : Honns. B.A. (PU for CHE) or Hons. B.A. (UNISA, UZ) or B.A. Hons. (US)
Honours Baccalaureus Artium : B.A.Hons. (UWC)

MASTER'S DEGREES

Master of Arts: M.A. (UCT, UFH, UN, UNorth, UOFS, PU for CHE, UP, RAU, RU, UNISA, US, UW, UZ) Magister Artium: M.A. (UDW, UPE, UWC)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW) Doctor of Literature: D. Litt. (UCT, UN, UNorth, UOFS, UP, RU, UW, UZ) Doctor Litterarum: D.Litt. (UDW, UPE, PU for CHE, US, UWC) Doctor of Philosophy: D.Phil. (UNorth, UP, UZ) Doctor Philosophiae: D.Phil. (UDW, UOFS, UPE, PU for CHE, US, UWC) Doctor of Literature and Philosophy: D.Litt.et Phil. (UFH, RAU, UNISA)

OTHER POST-GRADUATE DEGREE

Baccalaureus Philosophiae: B.Phil. (PU for CHE)

<u>Admission</u>: A Bachelor's degree provided that Philosophy is not one of the major subjects. Duration: Two years of part-time study.

DIPLOMA

Diploma in Applied Linguistics (UFH)

Admission: B.A. degree with either three courses in at least one of the following subjects: Afrikaans-Nederlands, Southern Sotho, Xhosa, 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' sa= tisfactory 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.

See EDUCATION (p. 77) for degree and diploma courses for teacher training in the field of Arts.

BANTU STUDIES

Universities: Potchefstroom, Rand Afrikaans University, South Africa

DIPLOMAS

Lower University Diploma in Bantuistics (PU for CHE)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) or a Senior Certificate with an acceptable pass.

Duration: Three years.

University Diploma in Bantuistics (PU for CHE)

Admission: An approved Bachelor's degree.

Duration: At least one year.

Diploma in Development Studies (RAU)

Admission: A Senior Certificate.

Duration: Two years.

Diploma in Bantu Studies (UNISA)

Admission: A Senior Certificate.

Duration: At least two years.

BIOPHYSICS

Universities: Pretoria, Stellenbosch

FIRST DEGREES

Bachelor of Science in Biophysics (Honours): B.Sc. (Biophysics)(Hons.) (UP)

Admission: A B.Sc. degree with Physics III or a B.Sc. (Eng.) degree with Physics 3FF and supplementary Physics.

Duration: A minimum period of one year.

Candidates who wish to qualify for registration with the SA Medical and Dental Council must, in addition to the B.Sc. (Biophysics) (Hons.) degree, gain practical experience in clinical hospital physics as prescribed by the said Council.

Honours Bachelor of Science with Biophysics as a major field of study: B.Sc. Hons. (US)

The course is differentiated into two major fields of study, viz (i) for more physically orientated students and (ii) for more biologically orientated students.

Admission to (i): A B.Sc. degree with Physics as one of the major subjects and Chemis= try II. Students must offer at least Physiology II (or another approved biological subject).

Admission to (ii): A B.Sc. degree with at least one biological major subject, as well as Physics I (or Physics (Bio.)), Mathematics I and either Biochemistry II or a M.B., Ch.B. degree. Students must offer at least Physics II. Duration: 18 months.

MASTER'S DEGREES

Master of Science in Biophysics: M.Sc. (Biophysics) (UP) Master of Science : M.Sc. (US)

DOCTOR'S DEGREES

Doctor of Science in Biophysics : D.Sc. (Biophysics) (UP) Doctor of Science : D.Sc. (US) Doctor of Philosophy : Ph.D. (US)

BUILDING

Universities: Cape Town, Natal, Orange Free State, Port Elizabeth, Pretoria, Witwaters= rand

FIRST DEGREES

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

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

Admission: As for the B.Arch. degree. See p.54.

Duration: Four years of full-time study.

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

Admission: As for the B.Sc. degree. See p. 135.

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 (UPE)

Admission: As for the B.Arch. degree. See p. 54.

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.) (UPE)

Admission: As for the B.Arch. degree. See p. 54.

Duration: Five years. A candidate must be in full-time employment of an approved employer during his fourth and fifth years of study.

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

Admission: As for the B.Arch degree. See p. 54.

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 regis= tered employer in the building industry. Bachelor of Building Technology : B.Sc. (Building Technology) Admission: As for the B.Arch. degree. See p. 54. Duration: Four years of full-time study.

<u>Bachelor of Science in Building: B.Sc. (Building)</u> (UW) <u>Admission</u>: As for the B.Arch. degree. See p. 54. Duration: Four years of full-time study.

MASTER'S DEGREES

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Master of Science (Building): M.Sc. (Building) (UCT) Master of Science in Building: M.Sc.Bldg. (UN)or M.Sc. (Building) (UW) Master of Science in Building Administration: M.Sc. (Building Admin.) (UOFS) Magister Scientiae in Building Management : M.Sc. (Bdg. Man.) (UPE) Master of Building Management: M.Sc. (Building Management) (UP)

(UP)

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UN, UW) Philosophiae Doctor in Building Management : Ph.D. (UPE) Doctor of Science in Building: D.Sc.Bldg. (UN) or D.Sc. (Building) (UW) Doctor of Building Management : D.Sc. (Building Management) (UP)

BUSINESS ADMINISTRATION

<u>Universities</u>: Cape Town, Durban-Westville, Potchefstroom, Pretoria, Stellenbosch, Witwatersrand

HONOURS DEGREES

Honours Business Administration : H.B.A. (PU for CHE)

Admission: A Bachelor's degree.

Duration: Two years. The course is offered extramurally at Potchefstroom and Van= derbijlpark.

This degree admits a candidate to the M.B.A. degree course at Potchefstroom University for C H $\ensuremath{\mathsf{E}}$

<u>Honours Bachelor of Business Management and Administration : B. (B. and A.) Hons</u>. (US) 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 Stellen= bosch.

MASTER'S DEGREES

Master of Business Administration: M.B.A. (UCT, UDW, UP, UW)

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 Account= ant and Auditor, and have passed Mathematics in Std 10 or Mathematics I at university, a level of maturity sufficient to benefit from this course, and sit for a series of admission tests, should this be considered necessary.

Pretoria: A Bachelor's degree, a pass mark in Mathematics on the Std 10 level and adequate 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 virture of his experience, qualifications and abilities.

Duration

Cape Town: One year of full-time study.

Durban-Westville: Three years of part-time study.

Pretoria: At least two years of 34 weeks each, but must be completed within four years. Extramural study.

Witwatersrand: 64 weeks of full-time study comprising six terms of eight weeks each or at least 128 weeks of part-time study comprising twelve terms of not less than eight weeks each (3 years).

Master of Business Administration : M.B.A. (PU for CHE) Master of Business Management and Administration : M.B.A. (US)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UCT, UW) Doctor of Business Administration : D.B.A. (UDW, PU for CHE, UP) Doctor of Business Management and Administration: D.B.A. (US)

DIPLOMAS

Advanced Diploma in Business Administration: Adv. Dip. B.A. (UCT)

Admission: Approved non-graduate 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 (UDW)

Admission: A Senior 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.

Duration: The M.B.A. degree course and Diploma course are identical.

Diploma in Business Administration: Dip.B.A. (UP)

Admission: Appropriate qualifications and/or experience.

Duration: The regulations for the M.B.A. degree are also applicable to the Diploma.

Diploma in Business Management and Administration : Dipl. (B. and A.) (US)

Admission: A Senior Certificate. Students must be adequately mature.

Duration: The B. (B. and A.) Hons. degree course and the Diploma course are identical.

Advanced Diploma in Business Management and Administration : Adv. Dipl. (B. and A.) (US)

Admission: The Dipl. (B. and A.) or a student must have achieved an adequate standard of proficiency in his specific field of study by other means. He must also have gained such practical experience to serve as adequate preparation for the course.

Duration: At least one year. The M.B.A. degree course and the Advanced Diploma course are identical.

BUSINESS LEADERSHIP

University: South Africa

DEGREES

Master of Business Leadership : M.B.L.

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: Eight semesters.

Doctor of Business Leadership : D.B.L.

BUSINESS SCIENCE

Universities: Cape Town, Durban-Westville

FIRST DEGREES

Bachelor of Business Science: B.Bus.Sc. (UCT)

Admission: As for the B.Com. degree. See p. 64.

Duration: Four years of full-time study.

Each student must choose one special field from the following: Actuarial Science, Bank= ing, Business Finance, Computing and Data Processing, Economics (General), Insurance, Marketing, Mathematical Economics, Personnel Management, Psychology, Public Administra= tion, Sociology, Statistics and Operational Research.

Bachelor of Business Science : B.Bus.Sc. (UDW)

Admission: Matriculation Certificate or Senior Certificate (Matriculation Exemption) with a pass in Mathematics on the Higher Grade or a D symbol on the Standard Grade or a pass in Mathematics I at a university.

Duration: Four years.

Principal subjects include Accounting, Business Economics, Economics, Industrial Psy= cology, 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.

MASTER'S DEGREE

Master of Business Science : M.Bus.Sc. (UCT)

DOCTOR'S DEGREE Doctor of Philosophy : Ph.D. (UCT)

CHEMICAL TECHNOLOGY

University: | Natal

FIRST DEGREE

Bachelor of Science in Chemical Technology: B.Sc.Chem.Tech.

<u>Admission</u>: The B.Sc. degree with 40 credits in Chemistry, 24 credits in Physics, and 24 credits in Mathematics; or the B.Sc. in Engineering degree with 40 approved credits in Chemistry, 24 approved credits in Physics and 24 approved credits in Mathematics. The 24 credits in Physics may be waived in the case of a candidate with appropriate ex= perience.

Duration: One academic year for a candidate who holds a B.Sc. degree and two academic years for a candidate who holds a B.Sc. Eng. degree.

MASTER'S DEGREE

Master of Science in Chemical Technology: M.Sc.Chem. Tech.

CLINICAL PSYCHOLOGY

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

DEGREES

Master of Science in Clinical Psychology: M.Sc. in Clinical Psychology (UCT)

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

Magister Scientiae in Clinical Psychology: M.Sc. (Clinical Psychology) (UDW) Master of Arts: M.A. (UFH, UN, PU for CHE, RAU, RU) Master of Science: M.Sc. (UFH, UN, PU for CHE, RAU, RU, UW) Master of Arts (Clinical Psychology) : M.A. (Clinical Psychology) (UOFS, US) Master of Science (Clinical Psychology) : M.Sc. (Clinical Psychology) (UOFS, US) Magister Societatis Scientiae (Clinical Psychology) : M.Soc.Sc. (Clinical Psychology) (UOFS) Master of Arts in Clinical Psychology : M.A. (Clinical Psychology) (UP, UNISA) or M.A. ·(Clin. Psych.) (UW) Admission: An Honours degree in Psychology. Duration: Two years, comprising one year of full-time class attendance and practical work and one year of full-time internship at an institution approved for the purpose by the South African Medical and Dental Council and the presentation of a dissertation. This is a specialised degree leading to professional registration with the South African Medical and Dental Council. Doctor's degrees: See Arts p. 57 and Science p. 137. COMMERCE Universities: All the universities in the Republic of South Africa FIRST DEGREES Bachelor of Commerce : B.Com. (UCT, UFH, UN, UNorth, UP, RU, UNISA, UW, UZ) or B.Comm. (US) Baccalaureus Commercii : B.Com. (UDW, UOFS, UPE, UWC) (PU for CHE) or B.Comm. Bachelor of Economic and Management Sciences : B.Com. (RAU) Admission: Matriculation Certificate or a Senior 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. Durban-Westville: A pass in Mathematics on the Higher Grade or at least a D symbol on the Standard Grade, except in the case of students who have matriculated with an aggre= gate of 60 per cent or higher. Fort Hare: Candidates who intend to major in Statistics must have passed Mathematics on the Standard Grade. Natal: A pass of at least 40 per cent in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade. North: For admission to the following courses a candidate must have obtained the stan= dard indicated in each case: Statistics I, Statistical Methods: A pass in Mathematics on the Standard Grade. Mathematical Methods : A pass of at least 50 per cent in Mathematics on the Standard Grade. Orange Free State: A pass in Mathematics on at least the Standard Grade. Port Elizabeth: For admission to the following courses a candidate must have obtained the standard indicated in each case: Mathematics I, Statistical Methods I : A pass of at least 40 per cent in Mathematics on the Standard Grade.

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- Mathematics for Economists : A pass in Mathematics on the Standard Grade.

Potchefstroom: A pass in Mathematics on the Standard Grade.

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. Candidates who have passed Mathematics on the Stan= dard Grade will only in exceptional cases be admitted to a course in Mathematics after a test set by the Department of Mathematics has been passed.

Rhodes: A pass in Mathematics with at least an F symbol on the Higher Grade or at least an E symbol on the Standard Grade is required for the following courses: Mathematics, Computing and Applied Mathematics, Physics or Statistics.

South Africa: A pass in Mathematics on the Standard Grade.

Stellenbosch: A pass in Mathematics on the Standard Grade. For admission to Mathema= tics I, a pass in Mathematics on the Higher Grade or 60 per cent on the Standard Grade.

Western Cape: A pass in Mathematics on the Higher Grade or at least 40 per cent on the Standard Grade.

Witwatersrand:

- A pass in English First Language Higher Grade or a pass of at least 40 per cent in English Second Language Higher 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*, Hewbrew, History, Latin, Physical Science.

*If not presented in fulfilment of Group A (Languages) requirement of the Joint Matri= culation Board.

Zululand: A pass of at least 40 per cent in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade.

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

Fields of study for first degrees

A student selects his curriculum from one of the following fields:

Accountancy/Accounting: UDW, UFH, UNorth, UOFS, UPE, PU for CHE, UP, RAU, RU, UNISA, UWC, UZ

Administration: UNorth, UNISA, UZ

Agricultural Economics and Co-operation: UOFS

Business Administration: UOFS, RU

Business Economics: UOFS, PU for CHE

Business Economics and Accountancy : UPE

Business Economics/Industrial Psychology: UFH

Commercial Computer Science: UPE

Communication: RAU

Computer Science : RAU

Cost Accounting : PU for CHE

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Econometry : UP, RAU Economics : UDW, UNorth, PU for CHE, RU, UNISA Economics and Business Economics : UPE Economics and Money and Banking : PU for CHE Economic Sciences : UP Education/Pedagogy : UPE, RAU General : UCT, UDW, UFH, UN, UOFS, RAU, RU, UNISA, US, UWC, UW, UZ Industrial and Organizational Psychology : UPE Industrial and Organizational Psychology (Behavioural Sciences) : UPE Industrial and Organizational Psychology (Management) : UPE Industrial and Organizational Psychology (Personnel Management) : UPE Industrial and Personnel Psychology : PU for CHE Industrial Psychology : RAU Legal field : UDW, UNorth, UOFS, UPE, PU for CHE, RAU, RU, UNISA, UWC, UW, UZ Marketing : UP Mathematical field : US Mathematics or Mathematical Statistics : UPE Money and Banking : UOFS Pedagogy/Education : UPE, RAU Personnel Management : UDW, UP Psychology : RU Public Administration (Financial Administration) : UPE Quantitative - Economical field : UOFS Statistics : UDW, UNorth, UOFS, PU for CHE, RU Transport/Transport Economics : UOFS, RAU See Appendix VI (p. 216) for undergraduate subjects according to universities in the Fa= culties of Commerce and/or Economic Sciences. HONOURS DEGREES Bachelor of Commerce (Honours) : B.Com. (Hons.) (UCT, UFH, UP) or B.Com.Hons. (UN) Honoris Baccalaureus Commercii : B.Com.Hons. (UDW) Bachelor of Commerce Honours : B.Com.Hons. (UNorth) Honneursbaccalaureus Commercii : B.Com.Hons. (UOFS) Baccalaureus Commercii Honores : B.Com.Hons. (UPE) Honneurs Baccalaures Commercii : Honns. B.Comm. (PU for CHE) Honours Bachelor of Economic and Management Sciences : B.Com.Hons. (RAU) Bachelor of Commerce with Honours : B.Com. (Hons.) (RU) or B.Com.Hons. (UW) Honours Bachelor of Commerce : Hons.B.Com. (UNISA, UZ) or B.Comm.Hons. (US) Honours Baccalaureus Commercii : B.Com.Hons. (UWC)

MASTER'S DEGREES

Master of Commerce : M.Com. (UCT, UFH, UN, UNorth, UP, RU UNISA, UW, UZ) or M.Comm. (US) Magister Commercii : M.Com. (UDW, UOFS, UPE, UWC) or M.Comm. (PU for CHE), Master of Economic and Management Sciences : M.Com. (RAU) Magister Philosophiae : M. Phil. (RAU)

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UCT, UN, RU, UW) Doctor of Commerce : D.Com. (UFH, UNorth, UP, UNISA, UW, UZ) or D.Comm. (US) Doctor Commercii : D.Com. (UDW, UOFS, UPE, UWC) or D.Comm. (PU for CHE) Doctor of Economics : D. Econ. (UN, RU) Doctor of Economic and Management Sciences : D.Com. (RAU) Doctor Philosophiae : D.Phil (RAU)

DIPLOMAS AND CERTIFICATE

Diploma in Commerce : Dip.Comm. (UFH)

Admission: A Senior Certificate.

Duration: Three years of full-time study.

Diploma in Commerce : Dip. Com. (UNorth)

Admission: A Senior Certificate.

Duration: Two years of full-time study.

University Diploma in Commerce (PU for CHE)

Admission: A Senior Certificate.

Duration: Three years of full-time study.

Certificate in Secretarial Practice (RU)

<u>Admission</u>: A Senior Certificate. Duration: Two years of full-time study.

COMMUNICATION/JOURNALISM

Universities: Fort Hare, Orange Free State, Potchefstroom, Rand Afrikaans University, Rhodes, South Africa, Stellenbosch, Witwatersrand

FIRST DEGREES

Bachelor of Arts in Communication : B.A. (Communication) (UFH)Bachelor of Arts (Communication): B.A. (Communication) (UOFS, PU for CHE)Bachelor of Arts: B.A. (RAU, UNISA)Bachelor of Journalism: B.Journ. (RU)Admission: As for the B.A. degree. See p. 55.Duration: Three years of full-time study. Four years at Fort Hare and Potchefstroom.

HONOURS DEGREES Honours Bachelor of Journalism : B. Journalism Hons. (US)Admission: Any approved Bachelor's degree. Duration: One year. 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) MASTER'S DEGREES Master of Arts (Communication): M.A.(Communication) (UOFS) Master of Arts: M.A. (PU for CHE, RAU, RU, UNISA) Master of Journalism: 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) DIPLOMAS University Diploma in Communication (PU for CHE) 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 (RAU) Admission: A Bachelor's degree. Duration: Two years. Higher Diploma in Communication Studies (UW) Admission: A Bachelor's degree. Duration: One year of full-time study or two years of part-time study. COMPUTER SCIENCE Universities: Most of the universities offer Computer Science as a subject for the B.Sc. degree. See Appendix VII p. 219.

OTHER DEGREES

Baccalaureus Scientiae in Operations Analysis : B.Sc. (PU for CHE)

Admission: Matriculation Certificate or a Senior 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 part-time study. The course is offered only extramurally at Vanderbijlpark.

B.Sc.Hons. with Operations Analysis as the major field of study (US)

Admission: A Bachelor's degree with at least one of the following subjects as a major subject: Mathematics, Computer Science, Applied Mathematics, Mathematical Statistics, Statistics OR a Bachelor's degree in Engineering.

Duration: At least one year.

DIPLOMAS

Diploma in Datametrics (UNISA)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass in Mathematics on the Standard Grade.

Duration: The Diploma must be obtained within five years of a student's first regis= tration for the diploma.

Diploma in Computer Science (UW)

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.

Higher Diploma in Business Data Processing: H.Dip.B.D.P. (UW)

Admission: A graduate who has attained a standard in Mathematics and Statistics equi= valent to that of Mathematics and Statistics A in the curriculum for the B.Com. degree and for the 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's Computing Centre).

Duration: Two years of part-time study.

COUNSELLING PSYCHOLOGY

Universities: Durban-Westville, Fort Hare, Orange Free State, Port Elizabeth, Potchef= stroom, Pretoria, Rand Afrikaans University, Rhodes, South Africa, Stellenbosch

DEGREES

Magister Artium in Counselling Psychology : M.A. (Counselling Psychology) (UDW) or M.A. (Couns. Psych.) (UPE)
Magister Scientiae in Counselling Psychology: M.A. (Counselling Psychology) (UDW)
Master of Arts : M.A. (UFH, PU for CHE, RAU, RU)
Master of Science : M.Sc. (UFH, PU for CHE, RAU, RU)

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

Admission: An Honours degree in Psychology.

Duration: As for Clinical Psychology. See p. 64.

Doctor's degrees: See Arts p. 57 and Science p. 137.

DIPLOMA

Post-graduate Diploma in Counselling Psychology (US)

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

Duration: Three years' part-time study. Candidates must attend intensive courses of two weeks each at the University, twice a year.

DENTAL TECHNOLOGY

University: Western Cape

DIPLOMA

Diploma in Dental Technology

Admission: A Senior Certificate with at least one science subject. A total of five applicants will be accepted for the course, after they have successfully completed tests of manual dexterity and shown an aptitude for the work.

Duration: Three years of full-time study.

DENTISTRY

Universities: Pretoria, Stellenbosch, Western Cape, Witwatersrand

FIRST DEGREES

Bachelor of Dental Science : B.Ch.D. (UP)

or B.D.S. (UW)

Bachelor of Dentistry : B.Ch.D. (US)

Baccalaureus Chirurgiae Dentium : B.Ch.D. (UWC)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Pretoria: As for the B.Sc. degree. See p. 135.

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: A pass in Mathematics with at least 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade.

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, His= tory, Latin, Physical Science, Physiology.

Duration: $5\frac{1}{2}$ years of full-time study.

Bachelor of Science in Oral Biology: B.Sc. (Oral Biology) (UW)

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.

HONOURS DEGREE

Bachelor of Dental Sciences Honours : B.Ch.D.(Hons.) (UP)

MASTER'S DEGREES

Master of Dental Science : M.Ch.D. (UP)

Master of Dentistry : M.Ch.D. (US)

Master of Dentistry : M. Dent. (UW)

Admission: A B.Ch.D. or B.D.S. degree and registration with the SA Medical and Dental Council as a dentist.

Duration: Three or four years of full-time study depending on the field of study and the university. The University of Stellenbosch offers part-time study to the full-time academic staff only.

The degree is offered as follows in the various branches by the universities mentioned:

Maxillo-facial and Oral Radiology - UW

Maxillo-facial and Oral Surgery - UP, US, UW

Oral Pathology - UP, US, UW

Orthodontics - UP, US, UW

Periodontics - UP, US

Periodontics and Oral Medicine - UW

Prosthodontics - UP, US, UW

Master of Dental Sciences : M.Dent. (UP) Master of Science in Dental Sciences: M.Sc. in Dental Sciences (US) Magister Scientiae Dentium : M.Sc. (Dent.) (UWC) Master of Science in Dentistry : M.Sc. (Dent.) (UW) Master of Dental Science : M.D.S. (UW)

DOCTOR'S DEGREES

Doctor of Dental Science : D.Ch.D. (UP) Doctor of Dentistry : D.Ch.D. (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)

DIPLOMAS

Diploma in Dental Public Health (UP)

Admission: Candidates must have held the degree of B.Ch.D. for at least two years and must be registered by the SA Medical and Dental Council as a dentist.

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

Higher Diploma in Dentistry : H.Dip.Dent. (UW)

Admission: A candidate must hold the degree of B.D.S. or an equivalent qualification and must be registered by the SA Medical and Dental Council as a dentist.

Duration: One year of full-time study or such longer period of part-time study as may be determined by the Senate.

DIETETICS

Universities: Cape Town, Natal, Orange Free State, Potchefstroom, Pretoria, Stellenbosch

FIRST DEGREES

Bachelor of Science in Dietetics: B.Sc.Diet. (UN) Bachelor of Science with Dietetics : B.Sc. (PU for CHE) Bachelor of Science with Dietetics and Physiology as major subjects: B.Sc. (US) Bachelor of Dietetics : B.Sc. (Dietetics) (UP)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Natal: As for the B.Sc. degree. See p. 135.

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. See p. 135.

Stellenbosch: Pass marks in Mathematics and Physical Science with at least one on the Higher Grade.

Duration: Three years of full-time study.

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) Doctor of Science in Dietetics : D.Sc. in Dietetics (UP)

DIPLOMAS

Diploma in Therapeutic Dietetics (UCT)

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.

Post-graduate Diploma in Hospital Dietetics (UN)

Admission: A B.Sc. degree in Dietetics or in Home Economics.

<u>Duration</u>: A candidate must complete a course of training of 12 months' duration at a teaching hospital recognised by the University and pass the prescribed written and oral examinations.

Diploma in Hospital Dietetics (UOFS, US)

Post-graduate Diploma in Hospital Dietetics (UP)

Admission: B.Sc. with Dietetics and Physiology as major subjects or B.Sc.(Dietetics) or B.Sc. in Home Economics (Dietetic field) or (Food and Nutrition).

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.

Drama

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

FIRST DEGREES

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

Admission: As for the B.A. degree. See p. 55.

Duration: Three years of full-time study. It is possible for a candidate to complete \overline{a} B.A. degree together with the Speech and Drama Performer's courses in a minimum period of study of four years.

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) Admission: As for the B.A. degree. See p. 55. Duration: Three years of full-time study. Bachelor of Arts (Dramatic Art and Theatrical Art): B.A. (Dramatic Art and Theatrical Art) (UOFS) Bachelor of Arts with Speech and Interpretation or Theatrical Art or Dramatic Art as major subjects : B.A. (PU for CHE) (UP:) Bachelor of Arts in Drama : B.A. (Drama) Bachelor of Drama : B. Drama (US) Admission: As for the B.A. degree. See p. 55. Duration: Three years of full-time study. Bachelor of Arts in Dramatic Art: B.A.(Dramatic Art) (UW) Admission: As for the B.A. degree. See p. 55. Duration: Four years of full-time study. HONOURS DEGREES Honoris Baccalaureus Artium: B.A.Hons. (UDW) Bachelor of Arts Honours: B.A.Hons. or Honns.B.A. (UN, PU for CHE) 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) Bachelor of Arts with Honours : B.A.(Hons.) (RU) Honours Bachelor of Drama: Hons.B.Drama (US) MASTER'S DEGREES Magister Artium: M.A. (UDW) (UN, PU for CHE, RU) Master of Arts: M.A. Master of Arts (Dramatic Art and Theatrical Art): M.A. (Dramatic Art and Theatrical (UOFS) Art) Master of Arts in Drama: M.A.(Drama) (UP) Master of Drama: M.Drama (US) M.A. (Dramatic Art) (UW) Master of Arts in Dramatic Art: DOCTOR'S DEGREES Doctor Philosophiae: D.Phil. (UDW, UP, US) Doctor of Philosophy: Ph.D. (UN, RU, UW) Doctor Litterarum: D.Litt. (UOFS, PU for CHE, RU) Doctor of Literature: D. Litt. (UP, UW)

DIPLOMAS

Performer's Diploma in Speech and Drama (UCT)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). A Senior Certificate may be accepted. A student must have shown marked talent as a performer. An audition with a member of the Speech and Drama Department is necessary.

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

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

Admission: A B.A. degree including at least two courses in Drama or a B.A. degree in= cluding three courses in English or in Afrikaans and the remaining courses predominant= ly in the humanities; and a qualification in Speech and Drama or practical experience and studies.

Duration: One year.

Diploma in Play Production (UN)

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 (UOFS)

University Diploma in Speech and Drama (PU for CHE)

Admission: A Senior Certificate.

Duration: Three years of full-time study.

University Diploma in Theatrical Art (PU for CHE)

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 (US)

Admission: A Senior Certificate.

Duration: Two years of full-time study.

See EDUCATION (p. 77) for diploma courses for teacher training in the field of Drama.

ECONOMICS

Economics is one of the options for the B.Com. degree (see p. 65) and the B.Bus.Sc. degree (see p. 62).

Universities: Natal, Rhodes, Stellenbosch, Western Cape, Witwatersrand

FIRST DEGREES

Bachelor of Economics : B.Econ. (RU)

Baccalaureus Economicae : B.Econ. (UWC)

Bachelor of Economic Science : B.Econ.Sc. (UW)

Admission: As for the B.Com. degree. See p. 65. The University of the Witwatersrand also requires a pass in Mathematics on the Higher Grade.

Duration: Three years of full-time study.

Bachelor of Economic Sciences : B.Econ. (US)

<u>Admission</u>: Matriculation Certificate or Senior 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 of extramural study.

HONOURS DEGREES

Bachelor of Economics with Honours : B.Econ. (Hons.) (RU) Honours Bachelor of Economic Sciences : B.Econ.Hons. (US) Honours Baccalaureus Economicae : B.Econ.Hons. (UWC) Bachelor of Economic Science with Honours: B.Econ.Sc.Hons. (UW)

MASTER'S DEGREES

Master of Commerce : M.Com. (RU) Master of Economic Sciences : M. Econ. (US) Magister Economicae : M.Econ. (UWC) Master of Economic Science: M.Econ.Sc. (UW)

DOCTOR'S DEGREES

Doctor of Economics : D.Econ. (UN) Doctor of Philosophy : Ph.D. (UN, RU, UW) Doctor of Economic Sciences : D.Econ. (US) Doctor Economicae : D.Econ. (UWC) Doctor of Economic Science : D.Econ.Sc. (UW)

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DIPLOMA

Higher Diploma in Property Economics : H.Dip.Prop.Econ. (UW)

Admission: Any Bachelor's degree or approved professional qualification.

Duration: At least three years of part-time study.

See Appendix VI (p.216) for undergraduate subjects according to the universities in the Faculties of Commerce and/or Economic Sciences.

EDUCATION

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

UNIVERSITY OF CAPE TOWN

Secondary teachers' courses

Higher Diploma in Education (Post-Graduate): Secondary: One year after an approved Bachelor's degree with at least two teaching subjects. In one of the teaching subjects three courses must have been completed and in the other, at least two courses.

<u>Higher Diploma in Education (Technical) : Secondary</u> : 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 recognised equivalent of any one of the above.

This Diploma is intended for prospective teachers in technical high schools.

<u>Higher Diploma in Education (Commerce): Secondary:</u> Four years of full-time study after a Senior Certificate or an equivalent certificate. The course, which is given in collaboration with the Cape Technikon provides training for secondary school teachers of commercial subjects.

Higher Diploma in Education (Home Economics) : Secondary: Four years of full-time study after a Senior Certificate or an equivalent certificate. The course, which is given in collaboration with the Cape Technikon provides training for secondary school teachers of Home Economics.

<u>Bachelor of Arts (Art) - B.A.(Art)</u>: Four years of full-time study after a Matricula= tion or Senior Certificate (Matriculation Exemption). In their fourth year candidates are admitted to the course for the Higher Diploma in Education (Post-Graduate): Secon= dary.

Bachelor of Music - B.Mus. (Music Education): Four years of full-time study after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). See MUSIC (p.115) for additional requirements.

Primary teachers' courses

Bachelor's degree in Primary Education - B.Prim. Ed.: Four years of full-time study after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Additional admission requirements as for the B.A. degree, p. 55.

<u>Higher Diploma in Education (Post-Graduate) : Primary</u>: One academic year after an approved degree including prescribed school subjects. This Diploma is intended for Arts and Science graduates who wish to teach in a primary school.

Primary and/or secondary teachers' courses

Teacher's Licentiate Diploma in Music: Four years after a Senior Certificate. Addi= tional admission requirements as for B.Mus. (Music Education), p. 115.

Special Endorsement in Music for holders of the Primary Teacher's Certificate: One year after a Senior Certificate and a Primary Teacher's Certificate.

Teacher's Diploma in Ballet: Three years after a Senior 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 or in Afrikaans, and the remaining courses predominantly in the humanities 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 Senior Certificate and the Primary Teacher's Certificate.

Other teachers' courses

<u>Diploma in Specialised Education : Clinical Remedial Teaching</u>: One academic year after an approved three-year teacher's certificate and at least two years' teaching experience in schools.

Diploma in Specialised Education : Special Class: One academic year after an approved three-year teacher's certificate.

Diploma in Specialised Education : The Deaf and the Partially Hearing: One academic year after a Senior Certificate and an approved three-year teacher's certificate.

<u>Diploma in Specialised Education : The Handicapped in Speech and Hearing</u>: One academic year after an approved three-year teacher's certificate.

Diploma in Nursing Education: See NURSING p. 124.

Diploma in Teaching Physiotherapy: See PHYSIOTHERAPY p. 134.

Diploma in Teaching Radiography : See RADIOGRAPHY p. 139.

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 seconda= ry schools.

The admission requirements are the same as for the field of study concerned. For Arts see p.55, Science p.135, Commerce p.64 and Home Economics p. 101.

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 or Senior Certificate with English or Afrikaans as first language passed on the Higher Grade, and English or Afrikaans as second language passed on the Higher or Standard Grade; and two other subjects passed on the Higher Grade OR any other qualification deemed equivalent by the Senate.

Primary teachers' courses

<u>Baccalaureus Paedagogiae in Primary Education - B.Paed.(Prim.Ed.)</u>: Four years of fulltime study after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). University Diploma in Education (Senior Primary): Three years of full-time study after a Matriculation Exemption Certificate or a Senior Certificate with English or Afrikaans as first language passed on the Higher Grade and English or Afrikaans as second language passed on the Higher or Standard Grade; and two other subjects passed on the Higher Grade 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 recognised institution and at least two years' teaching expe= rience at an ordinary school or one year's experience at a school for special education.

Diploma in Remedial Education: One year of full-time study or two years of part-time study after an approved three-year education diploma or an approved combined education degree and at least two years' teaching experience at a school for special education.

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 di= ploma, 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.

Resource Centre Teacher's Diploma: Two years of part-time study after an approved three-year teaching qualification, or a post-graduate teacher's diploma 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 Phy= siotherapy. The second year shall consist of practical work done at the School of Phy= siotherapy.

UNIVERSITY OF FORT HARE

Secondary teachers' courses

Bachelor of Pedagogics - B.Ped.: Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). This is an integrated professional degree which may be obtained in any of the following options:

- Arts (major subjects Afrikaans-Nederlands, Xhosa/Sotho, Biblical Studies, English, Geography, History)
- 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 Senior Certificate. The Diploma may be obtained in any of the following options: Arts, Science, Economic Sciences, Fine Arts, Physical Education, Music.

University Education Diploma (Graduate) - U.E.D.: One year after an approved universi= ty degree which includes the prescribed courses in school subjects.

University Education Diploma (Non-graduate) - U.E.D.: 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.

UNIVERSITY OF NATAL

Secondary teachers' courses

Higher Diploma in Education (Post-graduate) or the University Education Diploma (Postgraduate): One year after an approved degree containing the requisite number of school subjects.

Candidates must have obtained a pass in both official languages in the matriculation or equivalent examination with at least one on the Higher Grade.

University Education Diploma (Non-graduate): One year. Candidates are those who require at least two courses at first-year level or one course at second-year level in order to obtain an approved degree, provided that he/she has already successfully com= pleted his/her teaching subjects.

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.

<u>Higher Diploma in Education</u>: Four years of full-time study after a Senior Certificate, a pass in both official languages with at least a pass in the first language on the Higher Grade; and a pass in one further subject, excepting the official languages, on the Higher Grade. The curriculum must be completed in one of the following fields of study: Art, Commerce, Industrial Arts, Home Economics, Technical.

This Diploma is offered by the University in conjunction with the Natal Technikon, Durban.

Higher Diploma in Education: Four years of full-time study after a Senior 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 the Edgewood College of Education, Pinetown.

Higher Diploma in Education (Technical): Two years of part-time study after

- a Senior 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 with at least one passed on the Higher Grade, or other equivalent quali= fications, and
- a National Diploma in a specialist direction or equivalent, or a foreign qualifica= tion evaluated as being equivalent.

This Diploma is offered in conjunction with the Natal Technikon.

Higher Diploma in Education (Post-school): Two years of part-time study after

- a Senior 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, or a foreign qualification evaluated as being equivalent.

This Diploma is offered in conjunction with the Natal Technikon.

Other teachers' courses

Diploma in Specialised Education (Remedial Education): One year of full-time study or two years of part-time study after

- a degree plus an approved education diploma; or
- an approved education diploma requiring at least three years of training and, in addition, two years of approved teaching experience.

University Diploma in Nursing Education: See NURSING p. 124.

UNIVERSITY OF THE NORTH

Secondary teachers' courses

Bachelor of Arts in Pedagogy - B.A.Paed. or

Bachelor of Commerce in Pedagogy - B.Com.Paed.

Four years after a Matriculation Certificate or a Matriculation Exemption Certificate.

Bachelor of Science in Pedagogy - B.Sc.Paed.: Four years after a Matriculation Certifizate or a Matriculation Exemption Certificate. The admission requirements are the same as for the B.Sc. degree. See p. 135.

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 in= cluding courses in approved school subjects.

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.

UNIVERSITY OF THE ORANGE FREE STATE

Secondary teachers' courses

Higher Diploma in Education (Post-graduate) - H.D.E. (Post-graduate): One year of fulltime study or 18 months (3 semesters) of part-time study after a recognised degree which must also include approved subjects.

Higher Diploma in Education (Non-graduate) - H.D.E. (Non-graduate): Four years of fulltime study after a Senior Certificate or equivalent, with or without Matriculation Exemption, and passes in both official languages. This Diploma is offered in the fol= lowing fields: General; Science; Physical Education; Industrial Arts and/or Technical Drawing; Home Economics; Art Education; Commercial subjects; Dramatic Art and Theatri= cal 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 Senior Certificate (Matriculation Exemption). It is strongly recommended that prospective students take Biology for the Std 10 examination.

This degree grants admission to the H.D.E. post-graduate course for the professional training of prospective teachers. See also AGRICULTURE p. 52.

Bachelor of Science in Home Economics Education - B.Sc. Home Economics Ed.: Four years after a Matriculation Certificate or a Senior 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.

Bachelor of Music (School Music option) - B.Mus.(School Music): Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). See also MUSIC p. 115.

Secondary and/or primary teachers' courses

UOFS Teacher's Diploma in Music: Four years after a Senior Certificate. See B.Mus. (p. 115) for additional requirements.

UOFS Teacher's Licentiate in Music: Three years after a Senior Certificate.' See also MUSIC p. 118.

Other teachers' courses

<u>Post-basic Diplomas in Nursing</u> which includes, <u>inter alia</u>, <u>Post-basic Diploma in Nursing</u> Education: See NURSING p. 125.

Tertiary Education Diploma in Physiotherapy: See PHYSIOTHERAPY p. 134.

TEACHERS' COLLEGE OF THE UOFS

Education Diploma: Three years after a Senior Certificate with passes in both official Tanguages.

The College offers optional fourth year specialisation courses in subject teaching, special education or pre-primary teaching.

UNIVERSITY OF PORT ELIZABETH

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 con= cerned as well as the requirements for the training of teachers for secondary schools.

The admission qualifications for the above-mentioned degrees are the same as for the degree concerned. See B.Sc. p.135 and B.Com. p. 43.

Baccalaureus Artium (Educationis Technicae) - B.A.(Ed.Tech.): Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). This course is offered in collaboration with the Graaff-Reinet Teachers' College.

Higher Diploma in Education (Post-graduate) - H.D.E. (Post-graduate): One year after an approved Bachelor's degree of a recognised university which includes the minimum number of approved school subjects.

<u>Higher Diploma in Education - H.D.E.</u>: Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) or a Senior Certificate if the candidate has passed in both official languages on the Higher Grade; and one further subject, apart from the official languages, on the Higher Grade. This Diploma may be obtained with the following endorsements: Human Sciences; Natural Sciences (in the field of Physical and Mathematical Sciences or in the field of Biological Sciences); Economic Sciences; Physical Education; Woodwork and Metalwork; School Music; Typing, Snelskrif and Shorthand.

<u>Higher Diploma in Education (Technical) - H.D.E. (Technical)</u>: One year of full-time study after one of the following:

- An approved degree
- a Senior Certificate or equivalent qualification*and a qualification equivalent to Std 10 + 3 which includes two school subjects on a second-year degree level. (Tech= nical 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.

*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.

Secondary and or primary teachers' courses

<u>Baccalaureus Artium (Educationis) - B.A.(Ed.)</u>: 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, name= ly Junior Primary Teaching, Senior Primary Teaching and Secondary Teaching.

The admission qualifications are the same as for the ordinary B.A. degree p. 55.

Baccalaureus Musicae (Music Education) - B.Mus.(Music Education): Four years of fulltime study. See MUSIC p. 115.

<u>Diploma in Musical Education</u>: Three years of full-time study after a Senior Certificate. See B.Mus. (p.115) for additional requirements.

Primary teachers' course

<u>Diploma in Education - D.E.</u>: Three years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) or a Senior Certificate if the candidate has passed in both official languages on the Higher Grade and passed in two of the following subjects; at least one of which must be on the Higher Grade: Accountancy, Agricultural Science or Agriculture, Art, Biblical Studies, Biology or Physiology, Commercial Mathe= matics or Mathematics, Domestic Science, Economics, Functional Mathematics, Functional Science, Geography, History, Literature, Metalwork and/or Woodwork, Music, Needlework, Science, Technical Drawing, Xhosa.

There are two curricula, namely Junior Primary and Senior Primary.

Other teachers' courses

<u>Diploma in Specialised Education - D.S.E.</u> (Special classes for the mentally handicap= ped): Two years of part-time study or one year of full-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 recognises for the purpose.

Baccalaureus Curationis (Institutionis et Administrationis) - B.Cur.(I. et A.): See NURSING p.123.

Diploma in Nursing Education and Community Health Nursing - Dip. N.E.: See NURSING p. 124.

POTCHEFSTROOM UNIVERSITY FOR CHRISTIAN HIGHER EDUCATION

Secondary teachers' courses

Bachelor of Science (Domestic Science) (Education) - B.Sc. (Dom.Sc.Ed.): Four years af ter a Matriculation Certificate or a Senior 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.

<u>Higher Diploma in Education (post-graduate) - H.D.E. (post-graduate)</u>: One year after an approved degree of a recognised university which includes the minimum number of prescribed school subjects.

Higher Diploma in Education (post-graduate) (Guidance) - H.D.E. (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 Diploma in Education (post-graduate) (School Librarianship): One year after a Bachelor's degree which complies with the school requirements as stipulated by the Committee of Heads of Education, and which includes Library and Information Science I and II in the curriculum.

Higher Diploma in Education (Secondary) - H.D.E.(Sec.): Four years after a Senior Cer= tificate with passes in both official languages with at least a pass in the first lan= guage on the Higher Grade; and a pass in one further subject, excepting the official languages, on the Higher Grade. This Diploma is offered with the following curricula: Human Sciences, Pure Sciences, Economic Sciences (including Typing and Shorthand), Music, Domestic Science, Industrial Arts, School Librarianship, Art.

Potchefstroom University Teacher's Licentiate in Music: Three years after a Matricu= Tation Certificate or a Senior Certificate.

A student must satisfy the Head of the Department of Music in a practical and theore= tical 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.

Other teachers' courses

Diploma in Nursing Education (graduate): One year after a degree in Nursing.

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 con= cerned 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.55, B.Com. p.64 and B.Sc. p.135.

Bachelor of Agriculture (Education) - B.Agric.(Ed.): Four years of full-time study after a Matriculation Certificate or a Senior 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 Senior Certificate (Matriculation Exemption). See B.A. p. 55 for additional requirements.

Art as a Std 10 subject is not a requirement. Candidates must, however, take a prac= tical 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 Senior 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 justi= fies 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 Senior Certificate (Matricu= lation Exemption). See B.Sc.p. 135 for additional requirements.

Higher Diploma in Education (Post-graduate) - H.D.E. (Post-graduate): One year of fulltime study after a Bachelor's degree which either includes the minimum number of courses in approved school subjects or is recognised for teaching purposes irrespective of the subject combination.

Higher Diploma in Education (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 fulltime post-graduate course will be admitted to the extramural course.

Higher Diploma in Education - H.D.E.: Four years of full-time study after a Matricu-Tation Certificate or a Senior Certificate (Matriculation Exemption) or a Senior Certificate with Afrikaans and English as subjects passed : provided that one of the official languages must be passed on the Higher Grade and one further subject, except= ing the official languages, must be passed on the Higher Grade. This Diploma is of= fered with the following endorsements: General, Commercial subjects, Commercial sub= jects 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 (specialised 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) above 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. 55.

Pre-Primary teacher's course

<u>Bachelor of Arts (Education)(Pre-Primary)</u> - <u>B.A.(Ed.) (Pre-Primary)</u>: 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. 55.

At the beginning of the first year of study a candidate must do a practical test in the Faculty of Education in order to assess whether her instrumental proficiency (piano) justifies her admission to the course in Infant Music.

Other teachers' courses

Diploma in Orthopedagogics: One extended academic year after:

- A Bachelor's degree with Psychology or Sociology or Social Work or Occupational Therapy as a major subject; 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 recognised for education purposes.

Teacher's Diploma in Occupational Therapy: See p. 127.

Teacher's Diploma in Physiotherapy: See p. 134.

Diploma in Nursing Education: See p. 124.

Bachelor of Nursing (Instruction and Administration) - B.Cur.(I. et A.): See p. 123.

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<u>Tertiary teacher's course</u>

Tertiary Diploma in Education (Extramural): Two semesters of part-time study after

- a Bachelor's degree; or
- a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) plus another qualification which together with the appropriate experience justifies, in the discretion of the Senate, admission to the course.

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 Heads of Education 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. 56, B.Bibl. p. 108, B.Com. p. 65 and B.Sc. p. 136.

<u>Post-graduate Higher Diploma in Education - H.D.E. (Post-graduate)</u>: 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 Heads of Education.

<u>Post-graduate Higher Diploma in Education (Technical)</u>: As for the H.D.E. (Post-gra= duate) provided that one of the subject didactics must be in a technical field.

Four-year Higher Diploma in Education - H.D.E.: Four years of full-time study after a Matriculation Certificate or a Senior 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 dexterity), Physical Education, Librarianship.

For each of these fields there are additional admission requirements, mainly concerning pass marks in particular subjects in the Standard 10 examinations.

<u>One-year Higher Diploma in Education (Technical) - H.D.E. (Technical)</u>: One year after a Senior 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 me= chanics, electricity, radio mechanics, woodworking, plumbing, and welding and metal= work.

Other teachers' courses

Bachelor of Nursing Instruction and Administration - B.Cur. (Ed. et Adm.): See p. 123.

Diploma in Nursing Tuition: See p. 124.

RHODES UNIVERSITY

Secondary teachers' courses

<u>Higher Diploma in Education (Post-Graduate)</u>: One year after an approved degree with certain specified courses included in the curriculum for that degree.

<u>Higher Diploma in Education - H.D.E.</u>: Four years after a Senior Certificate with a pass in the first official language on the Higher Grade; passes in at least four fur= ther approved subjects, one of which, other than the second official language, must be on the Higher Grade; and at least an E symbol in each of the aforementioned subjects. The curriculum for the Diploma shall be arranged in accordance with certain provisions with regard to the courses to be followed.

<u>Rhodes University Licentiate Diploma in Music - R.U.L.M.</u>: Three years after a Senior Certificate, or the Board of the Faculty, on the recommendation of the Head of the Music Department, is satisfied as to the candidate's suitability to take the course.

The Diploma may be awarded as a diploma for performers, or for teachers, or for choir= masters, or for church organists.

Primary teachers! courses

<u>Diploma in Education</u>: Three years after a Senior Certificate. There are two curricula, namely for Senior Primary Teachers and Junior Primary Teachers.

<u>Higher Diploma in Education (Post-Graduate)</u> (For senior primary teachers): One year after a Bachelor's or higher degree which includes certain prescribed school subjects.

UNIVERSITY OF SOUTH AFRICA

Secondary teachers' courses

Higher Education Diploma (Post-graduate) - H.E.D.(Post-graduate): One or two years

after a Matriculation Certificate or equivalent with passes in both official languages, at least one of which as First Language Higher Grade; and a further subject on the High= er Grade (the official languages excluded); and an approved degree which includes the required number of courses in the approved school subjects <u>and</u> a teacher's diploma re= cognised 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 ten 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 univer= sity.

Further Diploma in Education - F.D.E.: At least two years after an approved three-year teaching qualification. A student must be employed as a teacher in a South African Education Department.

Higher Education Diploma (Technical) - H.E.D.(Technical): A student shall

- hold a Senior 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 Heads of Education as M + 3 (Ca= tegory C) and which included two recognised school subjects.

The curriculum extends over at least two years.

<u>Tertiary teacher's course</u>

<u>Diploma in Tertiary Education - D.T.E.</u>: A student must hold at least a Bachelor's de= gree. 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 le= vel.

The examination consists of six papers which may be written separately or simultaneous= ly.

Secondary and/or primary teachers' courses

Certificate in School Library Science

(<u>Note</u>: 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.

<u>Diploma in Special Education: School Library Science</u>: At least one academic year after

- an approved three-year or four-year teacher's diploma; or
- an approved degree and an approved teacher's 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-Pri= mary): At least two years after

- a recognised 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 sub= jects, 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.

(<u>Note</u>: 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 recognised two-year teacher's diploma for admission to which a Senior Certificate was required; or
- a degree with three courses in one and at least one course in another of the follow= ing subjects: Psychology, Sociology, Social Work, Education, Philosophy; or
- a degree, or a diploma for which a Senior Certificate was a prerequisite, in nurs= ing, speech therapy, physiotherapy, occupational therapy or social work.

Other teachers' courses

Diploma in Specialised Education - D.S.E.

A. Special Education

Special education for the epileptic, the cerebral palsied, the visually handicapped and the aurally handicapped.

The curriculum extends over at least two years after

- an approved teacher's diploma issued after a three-year training course; or
- a degree and an approved teacher's diploma; or
- an approved four-year teacher's diploma; or
- an approved combined degree and diploma.
- B. Remedial Education (Specific Learning Disabilities)

The curriculum extends over at least two years after

- an approved teacher's diploma issued after a three-year training course; or
- an approved degree and an approved teacher's diploma; or
- an approved four-year teacher's diploma; or
- an approved combined degree and diploma;

and

- at least three years' teaching experience.

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 Occupa= tional 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.

<u>Certificate in Special Education - C.S.E.</u> (Special education for epileptics, the cerebral palsied, the visually handicapped and the aurally handicapped.)

(Note: This Certificate is not recognised for salary purposes by the Department of Na= tional 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 Education and Training should enquire from these Departments about the recognition for salary purposes which they will re= ceive for the possession of the C.S.E.)

The curriculum extends over at least two years after a recognised teacher's diploma issued after a two-year teacher's training course for admission to which a Senior Cer=tificate was required.

Bachelor of Arts in Nursing - B.A. Cur.: See p. 122.

UNIVERSITY OF STELLENBOSCH

Secondary teachers! courses

Bachelor of Agricultural Education: Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with passes in Mathematics and a science subject on the Standard Grade.

Bachelor of Arts in Fine Arts (Educationis) - B.A. in Fine Arts (Ed.): Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Bachelor of Home Economics (Educationis) - B. Home Economics (Ed.): Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass in Mathematics or Physical Science on the Standard Grade.

Bachelor of Science in Home Economics (Educationis) - B.Sc. Home Economics (Ed.): Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemp= tion) with passes in Mathematics and Physical Science, of which at least one must be on the Higher Grade.

Bachelor of Music - B.Mus.: See MUSIC p. 115.

Higher Diploma in Education (Secondary - Music) - H.D.E. (Secondary - Music): Four years of full-time study after a Matriculation Certificate or a Senior Certificate with 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 (Uni= versity 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 specialised fields:

Teaching of an Instrument or Singing; School Music.

Teachers' Licentiate in Music: Three years. Admission requirements are the same as for the H.D.E. (Secondary - Music).

Higher Diploma in Education (Secondary) (Post-graduate) - H.D.E.: One year after a Bachelor's degree of a recognised university which includes the minimum number of school subjects.

Higher Diploma in Education (Secondary) - H.D.E. (Secondary): Four years'full-time stu= dy after a Matriculation Certificate or a Senior Certificate with an average of at least 50 per cent; a pass in both official languages with at least a pass in the first - on written application are admitted to the course by the Senate, or by the Executive Committee acting for the Senate.

Not more than 15 students are admitted to this course annually.

<u>Diploma in Specialised Education (School Librarianship)</u>: 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 integrated teaching degree. Students who have already specialised in School Librarianship may not be admitted.

Higher Diploma in Education (Primary) (School Music) - H.D.E. (Prim.) (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 or who hold the B.Mus. degree or the B.A.(Mus.) degree, are exempted from the aforementioned entrance examination.

Higher Diploma in Education (Primary) (Speech and Drama) - H.D.E.(Prim.)(Speech and Drama): One year after an approved Primary Teachers' Diploma. Persons who have already studied Speech Training as an intensive specialised field for the Primary Teacher's Diploma are not admitted.

Other teachers' courses

<u>Diploma in Specialised Education (Clinical Education)</u>: One year of full-time study after an approved three-year teachers' diploma (e.g. the Primary Teachers' Diploma), or a teaching degree (e.g. B. degree in Primary Education), or an approved degree combined with a one-year teachers' diploma (e.g. B.A. plus H.D.E.). Preference will be given to applicants with teaching experience.

Diploma in Specialised Education (Mentally Retarded): One year after:

- The Higher Primary Teachers' Diploma of this University or another three-year teach= ers' diploma or certificate which can be regarded as equivalent thereto; or
- a degree and the Higher Diploma in Education (H.D.E.) of this University or equiva= lent qualifications.

Diploma in Specialised Education (Mentally Retarded) (Post-graduate): Three years after a recognised degree with Psychology as a major subject as well as a teacher's certi= ficate, 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 Stellen= bosch twice a year.

Teachers' Diploma in Occupational Therapy: See p. 127.

Diploma in Nursing Education: See p. 124.

UNIVERSITY OF THE WESTERN CAPE

Secondary teachers' courses

Lower Secondary Teacher's Diploma - L.S.T.D.: Three years after a Senior Certificate with a pass of at least 40 per cent in one of the official languages as First Language Higher Grade or 50 per cent on the Standard Grade; 33 1/3 per cent in the other offi= cial language as Second Language Higher Grade; and 40 per cent in each of two other sub= jects on the Standard Grade.

The first two years are devoted to the study of academic subjects in one of the follow= ing fields: B.A., B.Sc. and Human Ecology; and the third year to professional subjects.

language on the Higher Grade; and a pass in one other subject, with the exception of the official languages, on the Higher Grade.

Students who wish to specialise in Natural Sciences must hold a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass in Mathematics.

This Diploma may be obtained in the following specialised fields: Human Sciences and Languages; Natural Sciences; Commerce; Physical Education; Home Economics and Needle= work. The Commercial field is also offered extramurally.

H.D.E. (Secondary) (Commerce) (Cape Technikon): This course extends over four years and is offered in co-operation with the Cape Technikon. Students attend the Technikon in Cape Town for the first three years and in the fourth year they follow the course in the Faculty of Education at the University.

The admission requirements are the same as that for the H.D.E. (Secondary) (Commerce).

H.D.E. (Secondary)(Woodwork - Metalwork): A four-year diploma course offered in cooperation with the Teachers' College Paarl.

H.D.E. (Secondary) (Agriculture): A four-year diploma course offered in co-operation with the Teachers' College Oudtshoorn.

Primary teachers' courses

Bachelor's degree course in Primary Education (General Field): Four years after a Ma= triculation Certificate or a Senior Certificate (Matriculation Exemption) with at least one of Mathematics or Commercial Mathematics or Functional Mathematics (Mathematics Practical); and 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 specialisation in Physical Education: Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Also see Bachelor's degree course in Primary Education (General Field).

Bachelor's degree course in Primary Education with specialisation in School Music: Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemp= tion), 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 examina= tions.

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.

Bachelor's degree course in Primary Education with specialisation in School Guidance: 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 Edu= cation (General Field); and

<u>Secondary Teacher's Diploma - S.T.D.</u>: 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 ad= mitted 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.

<u>Diploma in School Librarianship</u>: 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 postgraduate 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.

<u>Diploma in Music Teaching - D.M.T.</u>: Three years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption) and a Grade V Certificate (practical and theoretical) of UNISA or any other equivalent qualification.

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 Senior Certificate as well as an approved teacher's certificate, who has had teaching expe= rience and who has been approved by the Department of Education as a suitable candidate, may be admitted.

Diploma in Nursing Education - D.N.E.: See p. 124.

UNIVERSITY OF THE WITWATERSRAND

Secondary teachers' courses

Bachelor of Arts in Education - B.A. (Education)

Bachelor of Science in Education - B.Sc.(Education)

Each of the curricula of the above-mentioned degrees is a four-year integrated acade= mic and professional degree curriculum which fulfils all the requirements for the de= gree concerned as well as the requirements laid down by the Committee of Heads of Edu= cation for the training of teachers. The admission requirements are the same as for the ordinary degree concerned. For B.A. see p.56 and for B.Sc. see p.136.

Higher Diploma in Education (Post-graduate) - H.Dip.Ed.(P.G.): One year of full-time study or two years of part-time study after an approved degree which includes a suit= able combination of school teaching subjects.

<u>University Education Diploma (Post-graduate) - U.E.D.(P.G.)</u>: A person who has not passed in Afrikaans at the matriculation standard laid down by the entry requirements for the H.Dip.Ed.(P.G.), but who in all other respects has satisfied the requirements may be admitted as a candidate for the U.E.D. The rules applicable to the H.Dip.Ed. (P.G.) are applicable to the U.E.D.

Higher Diploma in Education - H.Dip.Ed.: Four years of full-time study after a Matri= culation Certificate or a Senior Certificate (Matriculation Exemption). The Senate may, until further notice, grant admission to a person who is not so qualified but who holds an approved Senior Certificate. Every curriculum shall include, either

- 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

or

- four or three courses, as the case may be, in two of the following academic subjects:

- . Accounting
- . Business Economics
- . Mercantile Law.

A candidate shall not be admitted to a first course in a practical subject unless he has passed an initial practical test in that subject.

Secondary and/or primary teachers' course

<u>Licentiate in Music - L.M.</u>: Three years of full-time study after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Diploma in Specialised Education - Dip.Spec.Ed.: Two years of part-time study after

- a degree and a recognised teachers' diploma and at least two years' experience in education; or
- a recognised teachers' diploma and a Senior Certificate (Matriculation Exemption) and at least five years' experience in education.

<u>Diploma in Remedial Education - Dip.Rem.Ed.</u>: Two years of part-time study after a de= gree and at least three years' experience in education.

Diploma in Nursing Education: See p. 124.

Diploma in Physiotherapy Education: See p. 134.

UNIVERSITY OF ZULULAND

Secondary teachers' courses

Baccalaureus Paedanomiae - B.Paed.: Four years after a Matriculation Certificate or a Senior Certificate (Matriculation Exemption). A student shall satisfy the require= ments of one of the following three options: Arts, Commerce or Science. Three succes= sive courses in Pedagogics as first major are compulsory.

<u>Senior Secondary Teacher's Diploma - S.S.T.D.</u>: After having satisfied all the require= ments for the first, second and third years in any one option of the B.Paed. degree a student shall obtain the S.S.T.D.

<u>Secondary Teacher's Diploma - S.T.D.</u>: One year after a student has satisfied the re= quirements for any one option in the first year B.Paed.

<u>University Education Diploma - U.E.D.</u>: One year after a Bachelor's degree which in= cludes 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.

POST-GRADUATE DEGREES

Bachelor of Education : B.Ed. (UCT, UFH, UN, UNorth, UP, RAU, RU, UNISA, US, UW)

Baccalaureus Educationis : B.Ed. (UDW, UOFS, UPE, PU for CHE, UWC, UZ)

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.

The curriculum comprises different specialised fields.

Bachelor of Education (Specialisation in School Guidance and Counselling): B.Ed. (S.G.C.) (UNISA)

Admission: A Bachelor, a teacher's diploma and at least five years' teaching experience. A student must have passed Education III or Psychology III or Counselling Psychology III. Students are selected.

Duration: At least one year.

MASTER'S DEGREES

Master of Education: M.Ed. (UCT, UFH, UN, UNorth, UP, RAU, RU, UNISA, US, UW) Magister Educationis: M.Ed. (UDW, UOFS, UPE, PU for CHE, UWC, UZ)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW) Doctor of Education: D.Ed. (UFH, UNorth, UP, RAU, UNISA, US, UW) Doctor Educationis: D.Ed. (UDW, UOFS, UPE, PU for CHE, UWC, UZ) Doctor of Literature: D.Litt. (UN, RU)

ENGINEERING

Universities: Cape Town, Durban-Westville, Natal, Potchefstroom, Pretoria, Rand Afri= kaans University, Stellenbosch, Witwatersrand

The Universities of the Orange Free State and Port Elizabeth offer training in Engineer= ing up to second-year level.

FIRST DEGREES

Bachelor of Science in Engineering: B.Sc.(Eng.) (UCT, UW)

or B.Sc.Eng. (UN)

Bachelor of Engineering: B.Eng. (UDW, US)

or B.Sc.Eng. (UP)

Bachelor of Science (Electrotechnics): B.Sc. (Electrotechnics) (PU for CHE)

Bachelor of Science (Engineering Chemistry): B.Sc. (Engineering Chemistry) (PU for CHE) Honours Bachelor of Science including Honours Bachelor Electrotechnics: B.Sc.Hons. (RAU) 1

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Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: Passes of at least 50 per cent in Mathematics and Physical Science on the Higher Grade. Candidates who have passed these subjects with at least 50 per cent on the Standard Grade, may be considered for admission.

Durban-Westville: Passes in Mathematics and Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade.

Natal: Passes in Mathematics and Physical Science of at least 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade.

Potchefstroom: 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, on the Standard Grade at least.

Pretoria: Passes in Mathematics and Physical Science of

- at least 50 per cent in the one on the Higher Grade and at least 40 per cent in the other on the Higher Grade; or
- at least 50 per cent in the one on the Higher Grade and at least 50 per cent in the other on the Standard Grade; or
- at least 40 per cent in the one on the Higher Grade and at least 60 per cent in the other on the Standard Grade; or
- at least 60 per cent in the one on the Standard Grade and at least 50 per cent in the other on the Standard Grade.

Rand Afrikaans University: A pass in Mathematics of at least 40 per cent on the Higher Grade or at least 50 per cent on the Standard Grade.

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: Provieded that the Senate may in exceptional circumstances, accept a pass of at least 60 per cent on the Standard Grade in either or both of these subjects.

Duration: Four years of full-time study except at the University of Durban-Westville where the course extends over five years of full-time study plus one year of practical training. At the University of Stellenbosch the Marine option course in Mechanical Engineering and in Electrical Engineering extends over five years of full-time study.

Engineering branches and/or options

Aeronautical Engineering: US, UW Agricultural Engineering: UN, UP Applied Geophysics: UW Automobile Engineering: US Chemical Engineering: UCT, UDW, UN, UP, US, UW Civil Engineering: UCT, UDW, UN, UP, US, UW Electrical Engineering: UCT, UDW, PU for CHE, UP, RAU, UW Electrical Engineering : Light Current or Heavy Current: UN, US Electronic Engineering : UP

Engineering Chemistry: PU for CHE Engineering Geology : UW Extractive Metallurgy : US Geological Engineering : UW Industrial or Production Engineering : UCT (post-graduate course), UP, US, UW Land Surveying or Surveying : UCT, UW (See LAND SURVEYING p. 103) Machine Construction : US Marine Engineering : US Mechanical Engineering : UCT, UDW, UN, UP, US, UW Metallurgical Engineering : UP Metallurgy : UW Metallurgy and Materials Science : UCT Minerals Process Engineering : UW Mining Engineering : UP, UW Mining Geology : UW Physical Metallurgy : UW Refrigeration Engineering : US

The Potchefstroom University for CHE and the Rand Afrikaans University offer training in Industrial, Mechanical, Metallurgical, Mining and Civil Engineering up to second-year level.

HONOURS DEGREES

Honours Bachelor of Science : Honns. B.Sc. (PU for CHE) Bachelor of Engineering (Honours): B.Sc.(Eng.)(Hons.) (UP) Honours Bachelor of Engineering : B.Eng.Hons. (US) Integrated Honours Bachelor of Engineering : B.Eng.Hons. (US)

MASTER'S DEGREES

Master of Science in Engineering : M.Sc.(Eng.) (UCT, UW) or M.Sc.Eng. (UN) Master of Engineering : M.Eng. (UDW, US) or M.Sc.Eng. (UP) Master of Science : M.Sc. (PU for CHE, RAU) Master of Science in Applied Science : M.Sc. (Appl.Sc.) (UCT) Master of Industrial Administration : M.Ind.Admin. (UCT)

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UCT, UN, UW) Doctor of Engineering : D.Eng. (UDW, US, UW) Doctor of Science in Engineering : D.Sc.(Eng.) (UCT, UW) or D.Sc.Eng. (UN) Doctor of Science : D.Sc. (PU for CHE) Doctor of Science : Ph.D. (RAU) Doctor Philosophiae : D.Phil. (RAU) DIPLOMAS

(a) Diploma in Engineering or

(b) Diploma in Industrial Administration (UCT)

Admission: A graduate or a non-graduate who holds suitable professional qualifications.

Duration: (a) Candidates have to complete courses chosen from special courses offered by the Faculty of Engineering and from other faculties.

(b) Candidates have to complete course-work prescribed by the Co-ordinator, Industrial Administration Programme, Department of Mechanical Engineering.

Diploma in Engineering (UN)

Admission: B.Sc.Eng.

Duration: At least one semester of study.

Diploma in Mining (UP)

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 (UW)

Admission: B.Sc.Eng., B.Sc.Hons., B.Sc. in Town and Regional Planning or B.Sc. in Build= ing, or have been admitted to the status thereof.

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

FINE ARTS

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

FIRST DEGREES

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Duration: Four years of full-time study.

In their fourth year candidates are admitted to the course for the Higher Diploma in Education (Post-graduate): Secondary.

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, UOFS, PU for CHE, UNISA, US, UW)

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

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

Admission: As for the B.A. degree. (See p. 55) Some universities require proof of practical ability in art. The University of Stellenbosch requires a pass in Mathematics or Physical Science on the Standard Grade for the field Jewelry Design and Metal Indus= try Design.

Duration: Four years of full-time study. Three years of full-time study at the Univer= sity of Fort Hare.

HONOURS DEGREES

Honoris Baccalaureus Artium in Fine Arts: B.A.(F.A.)Hons. (UDW) Bachelor of Arts in Fine Arts (Honours): B.A.(F.A.)(Hons.) (UFH) Honours Bachelor of Arts in Fine Arts: B.A. in Fine Arts Hons. (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.(F.A.) (UFH) 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 Arts: M.Fine Art (RU)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW) Doctor Philosophiae: D.Phil. (UDW, PU for CHE, UP, 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. (UN, UW)

Most of the universities offer History of Art as a major subject for the ordinary B.A. degree. The Universities of Natal and the Witwatersrand offer Fine Art as a major subject for the B.A. degree. Rhodes University offers Fine Art Studies as a major and two courses in Fine Art Practice for the ordinary B.A. degree.

DIPLOMAS

Diploma in Fine Art (UCT, RU)

Admission: A Senior Certificate.

<u>Duration</u>: Four years of full-time study. The courses are similar in content to that for the Bachelor's degree in Fine Art.

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

Admission: A Senior Certificate.

Duration: Three years of full-time study.

Diploma in the Fine Arts (UOFS)

Admission: A Senior Certificate. Students who did not have Art as a Std 10 subject, must take a practical test before admission, in order to determine whether they have the necessary artistic ability.

Duration: Three years of full-time study. The curriculum is more or less similar to that for the first three years of the B.A. (Fine Arts).

Diploma in Fine Arts (Graphic Design) (US)

Admission: A Senior Certificate.

Duration: Three years of full-time study. The curriculum is the same as that for the first three years of study for the B.A. Fine Arts, Graphic Design field.

Diploma in Graphic Design (UCT)

Admission: A Senior Certificate or special aptitude for art.

Duration: Four years of full-time study.

Advanced Diploma in Fine Art (UCT)

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

Duration: One year.

See EDUCATION (p. 77) for degrees and diploma courses for teacher training in the field of Fine Arts.

FOOD SCIENCE

University: Stellenbosch

FIRST DEGREE

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

Admission: As for the B.Sc. in Agriculture. See p. 51.

Duration: Four years of full-time study.

POST-GRADUATE DEGREES

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)

FORESTRY

University: Stellenbosch

FIRST DEGREE

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

<u>Admission</u>: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with passes in Mathematics and a science subject on the Standard Grade at least. Pros= pective students who wish to take a course which includes Chemistry and/or Physics are strongly advised to take Physical Science for the Std 10 examination. Should a student wish to take Botany and/or Zoology he is advised to take Biology as well as Physical Science for the Std 10 examination.

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Duration: Four years of full-time study.

In their third year of study students can select one of two fields, viz Silviculture or Silviculture - Nature Conservation.

After completion of their first year students can switch to the second year of study for the B.Sc. degree in Wood Science. See p.151.

POST-GRADUATE DEGREES

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

HOME ECONOMICS/DOMESTIC SCIENCE

Universities: Durban-Westville, Natal, Orange Free State, Potchefstroom, Pretoria, Stellenbosch, Western Cape

FIRST DEGREES

Baccalaureus Paedagogiae in Home Economics: B.Paed. Home Ec. (UDW)

Baccalaureus Scientiae in Home Economics Educationis: B.Sc. Home Economics Ed. (UOFS) Baccalaureus Scientiae (Domestic Science) (Educationis) : B.Sc. (Dom.Sc.Ed.) (PU for CHE)

Bachelor of Science in Domestic Science (Educationis): B.Sc.(Dom.Sc.)(Ed.) (UP) Bachelor of Home Economics (Educationis): B.Home Economics (Ed.) (US)

Admission: Matriculation Certificate or a Senior 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. See p. 135.

Potchefstroom: As for the B.Sc. degree. See p. 135.

It is strongly recommended that students take Physical Science for the Std 10 examina= tion.

Pretoria: As for the B.Sc. degree. See p. 135.

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

Duration: Four years of full-time study.

Bachelor of Science in Home Economics (Educationis) : B.Sc. Home Economics (Ed.) (US)

Admission: As for the B.Sc. degree. See p. 136.

Duration: Four years of full-time study.

Bachelor of Science in Home Economics: B.Sc. Home Econ. (UN) Baccalaureus Scientiae in Home Economics : B.Sc. Home Econ. (UOFS) Baccalaureus Scientiae (Domestic Science): B.Sc. (Dom.Sc.) (PU for CHE) Bachelor of Domestic Science : B.Sc.(Dom.Sc.) (UP) Bachelor of Home Economics : B. Home Economics (General) (US) Admission: As for the aforementioned degrees of the universities concerned.

Natal: As for the B.Sc. degree. See p.135.

Stellenbosch: Passes in Mathematics and a science subject on the Standard Grade.

Duration: Four years of full-time study. Three years of full-time study at the Univer= sity of Natal.

Baccalaureus Artium in Human Ecology (General): B.A. (H.E.) (UWC)

Admission: As for the B.A. degree. See p. 56.

Duration: Four years of full-time study.

Baccalaureus Artium in Human Ecology (Education) : B.A. (H.E.)Ed. (UWC)

Admission: As for the B.A. degree. See p. 56.

Duration: Four years of full-time study. Students take educational subjects during the third and fourth years of study.

HONOURS DEGREES

Bachelor of Science in Home Economics (Honours): B.Sc.Home Econ.Hons. (UN) Honneurs Baccalaureus Scientiae (Home Economics) : B.Sc. (Home Econ.)(Hons.) (UOFS) Honneurs Baccalaureus Scientiae: Honns.B.Sc. (PU for CHE) Bachelor of Domestic Science (Honours): B.Sc. (Dom. Sc.)(Hons.) (UP) Honours Bachelor of Home Economics: B.Home Economics Hons. (US) Honours Bachelor of Science in Home Economics: B.Sc.Home Economics Hons. (US)

MASTER'S DEGREES

Master of Science in Home Economics: M.Sc.Home Econ. (UN) Magister Scientiae in Home Economics: M.Sc. (Home Economics) (UOFS) Magister Scientiae: M.Sc. (PU for CHE) Master of Domestic Science: M.Sc.(Dom.Sc.) (UP) Master of Home Economics: M.Home Economics (US) Master of Science in Home Economics: M.Sc. Home Economics (US)

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UN) Doctor Scientiae: D.Sc. (PU for CHE) Doctor of Science: D.Sc. (UP) Doctor of Philosophy (Home Economics): Ph.D. (Home Economics) (US) Doctor of Science in Home Economics: D.Sc. in Home Economics (US)

See EDUCATION (p. 77) for diploma courses for teacher training in the field of Home Economics/Domestic Science.

INDUSTRIAL CHEMISTRY

Universities: Durban-Westville, Potchefstroom, Witwatersrand

FIRST DEGREES

Baccalaureus Scientiae in Industrial Chemistry : B.Sc. (Ind.Chem.) (UDW) Bachelor of Science in Industrial Chemistry: B.Sc. (Ind.Chem.) (UW)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Durban-Westville: As for the B.Sc. degree. See p.135.

Witwatersrand: A pass in Mathematics on the Higher Grade and a pass on the Higher Grade in one of the following subjects: Biology, Geography, Physical Science, Physic= logy.

Duration: Four years of full-time study.

Baccalaureus Scientiae (Industrial Chemistry) : B.Sc. (Ind.Chem.) (PU for CHE)

Admission: The B.Sc. degree with Chemistry and Industrial Chemistry as major subjects.

Duration: At least one year. The degree has the same status as an Honns.B.Sc. degree.

LANDSCAPE ARCHITECTURE

University: Pretoria

FIRST DEGREE

Bachelor of Landscape Architecture: B.L.

Admission: As for the B.Arch. degree. See p. 54.

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

POST-GRADUATE DEGREES

Master of Landscape Architecture: M.L. Doctor of Landscape Architecture: D.L.

LAND SURVEYING

Universities: Cape Town, Fort Hare, Natal, Pretoria, Witwatersrand

FIRST DEGREES

Bachelor of Science in Surveying : B.Sc.(Survey.) (UCT)

Bachelor of Science in Land Surveying : 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)

Admission: As for the Engineering degree. See p. 96.

Fort Hare: As for the B.Sc. degree. See p. 135.

Duration: Four years of full-time study.

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)

DIPLOMA

Diploma in Aerial Surveying (UN)

Admission: A degree.

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

LAW

Universities: All the universities in the Republic of South Africa

FIRST DEGREES

Baccalaureus Procurationis: B.Proc. (ATT the universities except Stellenbosch)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Durban-Westville: Persons who have not passed Latin with at least 40 per cent on the Higher Grade must pass Latin Special at the University.

North: A pass in both official languages.

Pretoria: A pass on the Higher Grade in at least two of the following subjects: Accountancy, Biblical Studies, Biology or Physiology, Economics, Geography, History, Mathematics, Physical Science, a third language.

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 or a pass in a special course in Latin at the University.

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.

Duration: Four years of full-time study or four 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. Baccalaureus Iuris : B. Iuris (UDW, RAU) Bachelor of Law: B.Juris (UFH) or B.Iur. (UNISA)

Baccalaureus Iuris : B.Iur. (UNorth, UOFS, UP)

Baccalaureus Juris : B. Juris (UPE) or B.Jur. (PU for CHE, UZ)

Baccalaureus Iurisprudentiae : B. Iuris (UWC)

Admission: As for the B.Proc. degree.

North: To be admitted to English I or Practical English a student must have obtained at least 33 1/3 per cent in English at the Matriculation or equivalent examination.

<u>Duration</u>: 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.

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

Bachelor of Arts (Law) : B.A. (Law) (RAU)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Durban-Westville: An aggregate of at least 45 per cent in the Matriculation examination and a pass in Latin with at least 40 per cent on the Higher Grade. Persons who have not passed Latin must pass Latin Special at the University.

Rand Afrikaans University: As for the B.Proc. degree.

Duration: Three years of full-time study.

Baccalaureus Legum Civilium: B.L.C. (UP)

Admission: As for the B.A. degree. See p. 55.

Duration: Three years of full-time study.

Bachelor of Laws : LL.B. (UCT, UFH, UN, RU, UNISA, US, UW)

Baccalaureus Legum : LL.B. (UDW, UNorth, UOFS, UPE, PU for CHE, RAU, UWC, UZ)

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 University of the North and five years at the University of Zululand.

At the University of South Africa the degree course extends over at least four years. By virtue of previous study a student may be exempted from twelve courses.

Baccalaureus Legum : LL.B. (UP)

Admission: As for the B.A. degree. See p. 55.

Duration: Five years of full-time study. May be shortened to three years if a candidate holds a Bachelor's degree which includes the prescribed LL.B. courses. MASTER'S DEGREES

Master of Laws: LL.M. (UCT, UFH, UN, RAU, RU, UNISA, US, UW) Magister Legum: LL.M. (UDW, UNorth, UPE, PU for CHE, UP, UWC, UZ) DOCTOR'S DEGREES Doctor of Philosophy: Ph.D. (UCT, UN, RU, UW) Doctor of Laws : LL.D. (UCT, UFH, UN, RAU, RU, UNISA, US, UW) Doctor Legum: LL.D. (UDW, UNorth, UOFS, UPE, PU for CHE, UP, UWC, UZ)

DIPLOMAS AND CERTIFICATES

Public Service Law Certificate(UFH)Public Service Law Examination(UNorth, UP, UNISA)Diploma in Law for Civil Servants(UOFS)Public Service Law Diploma(UPE)Law Diploma for Civil Servants(PU for CHE)

Admission: A Senior 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.

Natal Public Service Law Certificate (UN)

Admission: A degree or a Matriculation Certificate or a Senior Certificate (Matricu= Tation Exemption) with a pass in Latin or a school-leaving certificate.

Duration: Three years. This Certificate has been recognised by the Public Service Commission as equivalent to the Public Service Law Examination.

Senior Law Diploma for Civil Servants (PU for CHE)

Admission: Law Diploma for Civil 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 (UP, UNISA)

Admission: A student must have passed the Public Service Law Examination or another equivalent examination.

Duration: Two years.

Diploma Iurisprudentiae : Dipl. Iuris (UWC)

Admission: A Senior Certificate or equivalent.

Duration: Three years.

Higher Diploma in Tax Law: H.Dip.Tax Law (UW)

Admission: LL.B. or B.Proc. degree or an approved academic or professional qualifica= tion or be an attorney.

Duration: Two years of part-time study.

Diploma Juris (UZ)

Admission: A Senior Certificate.

Duration: Three years.

This Diploma is offered by the University's Institute for Public Service and Vocational Training.

Diploma Legum (UZ)

Admission: A certificate in Public Service Law Examination or any equivalent qualifi= cation.

Duration: Two years.

The Board for the Recognition of Professional Examinations in Law regards the Diploma Juris of the Institute for Public Service Training as the equivalent of the Public Ser= vice Law Examination and the Diploma Legum (also offered by the Institute) as the equi= valent of the Senior Public Service Law Examination.

LEATHER SCIENCE

University: Rhodes

DIPLOMA

Diploma in Leather Science (Post-graduate): Dip. Leather Sc.

Admission: A B.Sc. degree with Chemistry as a major subject. A candidate must obtain the permission of the Board of the Faculty of Science, on the recommendation of the Director of the Leather Industries Research Institute.

Duration: One year of full-time study.

LIBRARIANSHIP/LIBRARY SCIENCE

Universities: All the universities except the Universities of Port Elizabeth and the Witwatersrand

FIRST DEGREES

Baccalaureus Bibliothecologiae: B.Bibl. (UDW)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Duration: Four years. Candidates may qualify for the degree in one of the following fields: Arts, Natural Science or Commerce and Administration.

Bachelor in Library Science : B.Bibl. (UFH)

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

Bachelor of Library Science : B.Bibl. (UNISA, UZ) or

B. Library Science (UP)

Bachelor of Librarianship : B.Bibl. (RAU) or B. Librarianship (US)

Admission: As for the B.A. degree. See p. 55.

Duration: Four years of full-time study.

Bachelor of Music (Librarianship): B.Mus. (Librarianship) (UCT)

Admission: As for the B.Mus. degree. See p. 115.

<u>Duration</u>: Four years of full-time study.

Students specialise in Music Librarianship for the B.Mus degree. After completion of the first three years of study they may be admitted in their fourth year to the course for the Higher Diploma in Librarianship. See also p.109.

HONOURS DEGREES

Bachelor of Library and Information Science (Honours) : B.Bibl. Hons. (UN)

Admission: A Bachelor's degree and a Higher Diploma in Library Science.

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

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)

(UNISA. UZ)

Bachelor of Library Science (Honours): B. Library Science (Hons.) (UP)

Honours Bachelor of Librarianship: B.Bibl.(Hons.) (RAU) or B. Librarianship (Hons.) (US)

Honours Bachelor of Library Science: Hons.B.Bibl.

Honours Baccalaureus Bibliothecologiae: B.Bibl.Hons. (UWC)

MASTER'S DEGREES

Magister Bibliothecologiae: M.Bibl. (UDW, UOFS, PU for CHE, UWC) Master of Library and Information Science: M.Bibl. (UN) Master of Library Science: M.Bibl. (UNISA) or M. Library Science (UP) Master in Librarianship: M.Bibl. (RAU) or M. Librarianship (US) DOCTOR'S DEGREES Doctor of Philosophy: Ph.D. (UN) Doctor Philosophiae: D.Phil (UDW, UP, US) Doctor of Library Science: D.Bibl. (UNISA) Doctor Bibliothecologiae: D.Bibl. (UOFS, PU for CHE, UWC)

DIPLOMAS

Lower Diploma in Library Science (UDW, UFH, UP, UNISA, UWC, UZ)

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Some universities require only a Senior Certificate.

Duration: Two years of full-time study.

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Duration: Two years of full-time study.

The Diploma is offered in two directions: (i) Arts and (ii) Economics and Admini= stration.

<u>Higher Diploma in Library Science</u> (UDW, UFH, UN, UNorth, UP, UNISA, UWC, UZ) <u>Higher Diploma in Librarianship</u> (UCT, UOFS, PU for CHE, RU, US) <u>Post-graduate Diploma in Librarianship</u> (RAU)

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 of full-time study or four semesters of part-time study. At UNISA the course extends over at least two years.

Final Diploma in Librarianship (UCT)

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.

See EDUCATION (p. 77) for degrees and diploma and certificate courses for teacher training in the field of Librarianship.

MARKETING

The University of Cape Town offers Marketing as one of the special fields in the B.Bus. Sc. degree (see p. 62).

The University of Pretoria offers Marketing as one of the options for the B.Com. degree (see p. 65).

University: South Africa

DIPLOMA

Diploma in Market Research and Advertising

Admission: A Bachelor's degree.

Duration: Two years.

MEDICINE

Universities: Cape Town, Medunsa (Blacks only), Natal (Blacks, Coloureds and Indians only), Orange Free State, Pretoria, Stellenbosch, Witwatersrand

FIRST DEGREES

Bachelor of Medicine and Bachelor of Surgery : M.B., Ch.B. (UCT, UN, UP, US) or M.B., B.Ch. (UW)

Baccalaureus in Medicine : B.M. (UOFS)

Admission: Matriculation Certificate or a Senior 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. It is strongly recommended that Physical Science be one of the subjects for the Std 10 examination. From 1982 onwards a pass in Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade will also be a requirement.

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: Passes in Mathematics and Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade.

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 <u>and</u> a pass on the Higher Grade in one of the following subjects if Mathe= matics has been passed on the Higher Grade or two of the following subjects if Mathe= matics has been passed on the Standard Grade: Bantu Language, Biology, French, Geogra= phy, German, Hebrew, History, Latin, Physical Science, Physiology.

Duration: Six years of full-time study. At the Universities of Cape Town, Orange Free State, Pretoria and the Witwatersrand, the sixth year is a student-intern year or a Junior Intern Year.

Undergraduates must register with the South African Medical and Dental Council as medical students at the beginning of the first year of study for the degree.

After obtaining the degree, candidates are required to serve one year's internship in a recognised and approved institution before they can be registered by the South African Medical and Dental Council as medical practitioners.

Bachelor of Medicine and Bachelor of Surgery : M.B., Ch.B. (Medunsa)

Admission: The following subject combinations are acceptable for admission to M.B., Ch.B. II.

Combination I : Physics I, Chemistry I, Botany I, Zoology I

Combination II: Physics I, Chemistry I, Biological Sciences I.

Categories of persons to be considered for admission

- Applicants who are South African citizens and applicants from Transkei and South-West Africa
- Applicants who are not South African citizens but whose families are permanently resident in Botswana, Lesotho, Rhodesia, South Africa or Swaziland
- Applicants from other countries not belonging to either of the above categories, but who have made the necessary arrangements through appropriate diplomatic channels.

Admission: The degree of M.B., Ch.B. or equivalent 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 univer= sities mentioned: Anaesthetics - UCT, UN, UOFS, UP, US, UW Cardio-Thoracic Surgery - UOFS, UW Community Health - UCT, UN Dermatology; UCT, UN, UOFS, UP, US Forensic Medicine - UOFS, UP Geriatrics - UP Haematology - UOFS Internal Medicine - UOFS, UP, US, UW (i) Military - UP Endorsement: **Onchochemotherapy** - UP (ii) Medical Administration - UP Medical Microbiology - UOFS Medicine - UCT, UN Neurology - UP, UOFS, US Neurosurgery - UCT, UOFS, UP, US, UW Nuclear Medicine - UCT, UW Obstetrics and Gynaecology - UCT; UN, UOFS, UP, US, UW Ophthalmology - UCT, UN, UOFS, UP, US, UW Endorsement: Military - UP Orthopaedics - UCT, UOFS, UP, US Orthopaedic Surgery - UN, UW Otorhinolaryngology - UCT, UN, UOFS, UP, US, UW Endorsement: Military - UP Paediatrics - UCT, UOFS, UP, US, UW Paediatrics and Child Healtn - UN Pathology - UN Pathology (Anatomical) - UCT, UOFS, UP, US, UW Pathology (Chemical) - UCT, UOFS, UP, US, UW Pathology (Clinical) - UCT, UOFS, UP, US, UW Pathology (Forensic) - UCT Pathology (Haematological) - UCT, UP, US, UW Pathology (Microbiology) - UCT, UP, US, UW Physical Medicine - UP Plastic and Reconstructive Surgery - UCT, US, UW Plastic Surgery - UOFS, UP Preventive Medicine - UP Psychiatry - UCT, UOFS, UP, US, UW Endorsement (i) Forensic Psychiatry - UP (ii) Military - UP (iii) Paediatrics - UP

Duration: Six years of full-time study. The sixth year is a Student Intern year.

Bachelor of Science (Medicine) : B.Sc.(Med.) (UCT)

Admission: This degree course is offered only to

(i) students registered for the degree of M.B., B.Ch. who show an above-average aca= demic achievement in the Second Professional Examination;

(ii) holders of an approved Diploma in Radiography; and

(iii) a student who has obtained credits for approved courses in Animal and General Biology, Human Biology, Physics and Chemistry and a half course in Mathematics who ex= presses a wish to follow a career in medical science.

Duration: Three years of full-time study.

A candidate may be registered concurrently for the B.Sc.(Med.) and the M.B., Ch.B. de= grees.

Bachelor of Science (Medical Science): B.Sc.(Med.Sci.) (UN) 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. (UOFS)

Admission: As for the B.M. degree.

Duration: Three years of full-time study.

A student who passed the courses prescribed for the first year may be admitted to B.M. II after selection. Students who passed in B.M. II may be admitted to B.Med.Sc.III and must then complete further courses prescribed by the University, to obtain the degree of B.Med.Sc.

Bachelor of Medical Sciences: B.Med.Sci. (UP)

Admission: As for the M.B., Ch.B. degree. Only 25 students are selected per annum.

<u>Duration</u>: Three years of full-time study.

Bachelor of Science in Pathology: B.Sc.(Path.) (UW)

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.

HONOURS DEGREES

Bachelor of Science (Medicine) (Honours): B.Sc.(Med.)(Hons.) (UCT) Honours Bachelor of Medical Sciences: B.Med.Sc.Hons. (UOFS) Bachelor of Science (Honours) in Medical Science: B.Sc. in Medical Science (Hons.) (US)

MASTER'S DEGREES

<u>Master of Medicine : M.Med</u>. (UCT, UN, UOFS, UP, US) <u>Master of Medicine in Clinical Disciplines</u> : M.Med. (UW)

Radiology - UN Radiodiagnosis/Diagnostic Radiology - UCT, UN, UOFS, UP, US, UW Radiotherapy/Therapeutic Radiology - UCT, UN, UOFS, UP, US, UW Surgery - UCT, UN, UOFS, UP, US, UW Thoracic Surgery - UCT, US Thorax Surgery - UP Urology - UCT, UOFS, UP, US, UW Master of Science (Medicine): M.Sc.(Med.) (UCT) 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) Master of Medicine in Forensic Pathology: M.Med.(Path.Forens.) (UW)

DOCTOR'S DEGREES

Doctor of Medicine: M.D. (UCT, UN, UP, US, UW) or D.M. (UOFS) Doctor of Philosophy : Ph.D. (UCT, UW) Philosophiae Doctor : Ph.D. (UOFS) Doctor Scientiae: D.Sc. (UOFS) Doctor of Medical Sciences : D.Med.Sci. (UP) Doctor of Philosophy (Medicine) : Ph.D.(Med.) (US) 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) Doctor of Philosophy in Medicale: Ph.D.(Med.) (US)

POST-GRADUATE DIPLOMAS

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 Occupational Health (UW) Diploma in Occupational Medicine (US) Diploma in Psychological Medicine (UCT, UW) Diploma in Public Health (UP, UW) Diploma in Tropical Medicine and Hygiene (UW)

METEOROLOGY

University: Pretoria

FIRST DEGREE

Bachelor of Science in Meteorology : B.Sc. (Meteorology)

Admission: As for the B.Sc. degree. See p. 135.

Duration: Four years of full-time study.

POST-GRADUATE DEGREES

Bachelor of Science (Honours) : B.Sc.(Hons.) Master of Science : M.Sc. Doctor of Science : D.Sc.

MILITARY SCIENCE

University: Stellenbosch

FIRST DEGREE

Bachelor of Military Science : B.Mil.

Admission: Students must

- hold a Matriculation Certificate or a Senior Certificate (Matriculation Exemption);
- for the Science field, have passed Mathematics and Physical Science on the Standard Grade, and for the Commerce field, Mathematics on the Standard Grade; and
- have been accepted by the military selection board for officer training.

<u>Duration</u>: Three years of full-time study. The B.Mil. degree can be followed in one of the following fields: Arts; Science; Commerce.

All the courses are followed at the Military Academy at Saldanha which is the seat of the Faculty of Military Science.

POST-GRADUATE DEGREES

Honours Bachelor of Military Science : B.Mil.Hons.

Master of Military Science : M.Mil.

Doctor of Military Science : D.Mil.

MINING GEOLOGY*

University: Pretoria

FIRST DEGREE

Bachelor of Science in Mining Geology : B.Sc. (Mining Geology)

Admission: As for the B.Sc. degree. See p. 135.

Duration: Four years of full-time study.

Students are required to undertake at least 20 weeks' vacation work of which 10 weeks must be devoted to Applied Geophysics and at least 5 weeks must be spent in a mine.

See PURE SCIENCE for post-graduate degrees, p. 137.

*At the University of the Witwatersrand Mining Geology is one of the options in the branch of Geological Engineering.

MUSEOLOGY

Universities: Pretoria, Stellenbosch

DIPLOMAS

Diploma in Museology (UP)

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; or such knowledge of another appropriate subject which in the opinion of the Head of the Department of Afrikaans and Netherlands Cultural History justifies admission to the course.

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

Post-graduate Professional Diploma in Museology (US)

Admission: A Bachelor's degree with at least 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: One year of full-time study.

MUSIC

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

FIRST DEGREES

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

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: Candidates should have attained the following:

- Practical: The level required to pass the Grade VI examination laid down by the Uni= versity of South Africa, the Associated Board of the Royal Schools of Music or the Trinity College of Music.

Note: Grade VII level is required for entrance to the B.Mus. (Performance) degree course.

- Theoretical : Candidates should have acquired a standard equivalent to:

Unisa ... Harmony Grade V Royal Schools ... Theory Grade VII Trinity College ... Theory Grade VI

A candidate who has not passed any of the above-mentioned examinations must undertake an examination/audition at the beginning of the academic year to ascertain his/her abi= lity to take the course. Natal: As for the University of Cape Town with the exception of B.Mus. (Performance).

Orange Free State: Each candidate must satisfy the head of the department that his pro= ficiency in the performing art as well as his musicality and general knowledge of music justifies admission. He must have obtained at least 50 per cent in Music on the Higher Grade or at least 60 per cent in Music on the Standard Grade, or attained a standard in the practical subject equivalent to the Grade VII Examination of the University of South

Port Elizabeth: A candidate must have obtained the standard indicated below:

- Systematic Music Theory I, Main Instrument I : A standard of 60 per cent in Music on the Standard Grade or 50 per cent on the Higher Grade, or a standard in both theory and practical work regarded as equivalent thereto by the Chairman of the Music Sub=
- School Music I : A Grade V Certificate of the University of South Africa or equiva=

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 (Grade VII) of the University of South Africa.

Pretoria: (i) A pass in at least two of the following subjects on the Higher Grade: Geography, Biology or Physiology, Biblical Studies, Economics, History, Music, Physical Science, Mathematics, a third language: Provided that a pass mark in a third language on the Standard Grade may be accepted if it was offered on the Standard Grade only.

(ii) A candidate must satisfy the lecturers concerned in a practical test at the be= ginning of the year that his proficiency in the performing art as well as his musicality and general knowledge of music justifies admission.

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

Witwatersrand: A pass in Music on the Higher Grade. See also p.56.

Duration: Four years of full-time study.

Bachelor of Musicology : B.Mus. (UNISA)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). A student must have reached a standard in practical music equivalent to that of Grade VII of the Music Certificate Examination of the University of South Africa or that re= quired for Music at the Matriculation or equivalent examination.

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Duration: Four years.

The degree shall not be awarded until the student has also obtained one of the following Licentiates at the practical music examinations of the University: Teachers', Perform= ers', Accompanists', Church Organists', Military Bandmasters'.

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

Admission: As for the B.Mus degree.

Duration: Three years of full-time study.

Bachelor of Arts with Music subjects : B.A. (PU for CHE)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). A candidate must satisfy the Head of the Department of Music in a practical test that his standard of music is equivalent to the requirements of the Advanced Certificate (Grade VII) of the University of South Africa.

Bachelor of Arts with Music as a major subject : B.A. (UDW, UN, RU, US)

Admission: Durban-Westville, Rhodes: As for the B.A. degree. See p. 56.

Natal, Stellenbosch: As for the B.Mus degree. See p.116.

<u>Duration</u>: Three years of full-time study.

Baccalaureus Artium in Music : B.A.(Mus.) (UWC) Bachelor of Arts (Music) : B.A.(Mus.) (UZ)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Western Cape: Candidates should hold the Grade IV Certificate (practical and theoreti cal) of the University of South Africa or its equivalent, otherwise they have to do an entrance examination of the required standard in the principal practical subject and in theoretical work.

Zululand: A candidate must have obtained Grade V (Theory) of the University of South Africa or a qualification approved by the Head of the Department of Music and the Dean of the Faculty of Arts.

Duration: Three years.

Bachelor of Pedagogics: B.Ped. (UFH)

Admission: As for the B.A. degree. See p. 55.

Duration: Four years.

This is an integrated professional degree which may be taken with Music as one of the options. See EDUCATION p. 79.

See EDUCATION (p. 77) for other degree courses for teacher training in the field of Music.

HONOURS DEGREES

Honours Bachelor of Music: B.Mus(Hons.) (UP) or Hons.B.Mus. (US) Honneurs-Baccalaureus Músicae: B.Mus.(Hons.) (UOFS) or Honns.B.Mus. (PU for CHE) Honours Bachelor of Musicology: Hons.B.Mus. (Unisa) Honneurs-Baccalaureus 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)

DIPLOMAS

Cape Town

Performer's Diploma in Music (Accompanying) Performer's Diploma in Opera Performer's Diploma in Orchestral Playing Teacher's Licentiate Diploma in Music

Admission: At least a Senior Certificate. Additional requirements are similar to those for the B.Mus(Music Education).

Duration: The curriculum of the Teacher's Licentiate Diploma extends over four years and that of the other diplomas each three years; exceptional proficiency may exempt stu= dents from the first year of the curriculum concerned.

Performer's Diploma in Music (Solo)

Admission: At least a Senior Certificate and in practical music the equivalent of the standard required for Grade VIII by the University of South Africa, the Associated Board of the Royal Schools of Music, or the Trinity College of Music.

Duration: Three years.

Teacher's Diploma in Ballet

Performer's Diploma in Ballet

Admission: A Senior Certificate.

Duration: Three years.

Natal

Performer's Diploma

A one-year post-graduate course for either instrument or voice.

Orange Free State

UOFS Teacher's Diploma in Music

Admission: A Senior Certificate. Additional requirements are similar to those for the B.Mus. degree.

Duration: Four years of full-time study. The curriculum is similar to that for the B.Mus. degree.

UOFS Teacher's Licentiate in Music

Admission: As for the above Diploma.

Duration: Three years of full-time study.

UOFS Performer's Licentiate in Music

Admission: UOFS Teacher's Licentiate in Music.

Duration: One year.

Port Elizabeth

Diploma in Orchestral Playing

<u>Admission:</u> B.Mus. degree or the Diploma in Musical Education. A candidate must satisfy the Chairman of the Music Subject Committee 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

Admission: As for the Diploma in Orchestral Playing.

Duration: Two years of full-time study.

Diploma in Musical Education

Admission: A Senior Certificate. Additional requirements are similar to those for the B.Mus. degree.

Duration: Three years of full-time study.

Potchefstroom

Diploma for Church Organists

Admission: A Senior Certificate and the Certificate for the Intermediate Organ Examina= tion 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 equi= valent standard.

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

University Diploma in Musical Performance

Admission: A Senior Certificate and evidence of proficiency.

Duration: One year. The examination includes the recital of a complete concert pro= gramme.

Potchefstroom University Teacher's Licentiate in Music

Admission: At least a Senior Certificate. A student must satisfy the Head of the De= partment of Music in a practical and theoretical test that his/her standard is high enough to attend the course with profit. The student 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.

Duration: Three years.

Pretoria

Diploma in Music (Individual Teaching)

Admission: A Senior Certificate. At the beginning of the first year a candidate must satisfy the lecturers concerned in a practical test that his/her proficiency in the per=forming art as well as his/her musicality and general knowledge of music justifies ad=mission.

Duration: Three years of full-time study.

Diploma in Music (Church Music)

Admission: As for the Diploma in Music (Individual Teaching).

Duration: Three years of full-time study.

Rhodes

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

Admission: A Senior 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.

Duration: Three years of full-time study. The Diploma may be awarded as a diploma for performers, or for teachers, or for choirmasters, or for church organists.

Stellenbosch

Performer's Licentiate in Music

Admission: A Senior Certificate and evidence of sufficient ability as performers. The minimum standard required is equivalent to the Grade VIII Examination of the Universi=ty of South Africa.

Students must also give evidence in an entrance examination of sufficient knowledge of Harmony, or must have obtained a pass 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

Admission: B.Mus. degree or B.A. degree with Music as one of the major subjects, or the Higher Diploma in Education (Secondary - Music), or the Teacher's Licentiate in Music, or the Performer's Licentiate in Music, or another qualification which the Se= nate regards as adequate. Students must give evidence in an entrance examination of sufficient ability as performers.

Duration: One year.

Diploma for Church Organists

Admission: A Senior Certificate. Candidates must give evidence in an entrance examination of their proficiency in playing the organ as well as of sufficient musicality and general knowledge of music to be able to follow the course.

Duration: Two years.

Western Cape

Diploma in Music Teaching : D.M.T.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Candidates should hold the Grade V Certificate (practical and theoretical) of the Uni= versity of South Africa or any other equivalent qualification, otherwise they are ex= pected to do an entrance examination of the required standard in the principal practical subject and in theoretical work.

Duration: Three years.

Witwatersrand

Licentiate in Music : L.M.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Admission shall be at the discretion of the Senate.

Duration: Three years of full-time study.

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

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 recognised 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.

See EDUCATION (p. 77) for other diploma courses for teacher training in the field of Music.

NATURE CONSERVATION,

University: Stellenbosch

DEGREES

B.Sc.Hons. in Nature Conservation

Admission: A B.Sc. degree with Zoology, Botany or Biology as one of the major subjects.

Duration: At least one year.

M.Sc. in Nature Conservation

Ph.D. (Nature Conservation)

D.Sc. in Nature Conservation

NURSING

<u>Universities</u>: Cape Town, Natal, North, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, Rand Afrikaans University, South Africa, Stellenbosch, Western Cape, Wit= watersrand.

FIRST DEGREES

Bachelor of Science (Nursing) : B.Sc. (Nurs.) (UCT)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass in Mathematics on the Standard Grade. A pass in Physical Science, Physics or Chemistry or Biology on the Standard Grade is recommended.

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 probation 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.

Bachelor of Social Science (qualified as a nurse): B.Soc.Sc. (UN) Baccalaureus Societatis Scientiae in Nursing: B.Soc.Sc. (Nursing) (UOFS)

Baccalaureus Curationis: B.Cur. (UPE, UWC)

Baccalaureus Artium et Scientiae (Nursing): B.Art. et Scien. (Nursing) (PU for CHE)

Bachelor of Nursing: B.Cur. (UP, RAU)

Bachelor of Nursing: B.Nursing (US)

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) and proof of enrolment as a student nurse at a training hospital approved by the South African Nursing Council.

Additional requirements:

Potchefstroom: A student must have either Mathematics, Science and Biology or Mathema= tics and Science or Science and Biology or Mathematics and Biology or Mathematics as Std 10 subjects. Students are selected.

Pretoria, Rand Afrikaans University: Mathematics or Physical Science at matriculation level will be a strong recommendation.

Stellenbosch, Western Cape: Only a limited number of students are admitted to the course each year.

Witwatersrand: A pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade <u>and</u> a pass in one of the following subjects if Mathematics has been pas= sed 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, His= tory, Latin, Physical Science, Physiology.

Duration: Three years (Orange Free State); four years (Natal, Potchefstroom, Stellen= bosch, Witwatersrand); four and a half years (Port Elizabeth, Pretoria, Rand Afrikaans University, Western Cape).

Students at the University of the Orange Free State will only be able to register with the SA Nursing Council after obtaining the degree of B.Soc.Sc.(Hons.)(Nursing). The course for this degree extends over three semesters.

Bachelor of Arts in Nursing Science : B.A. (Cur.) (UNISA)

Admission: Proof of registration with the SA Nursing Council either as a general nurse and as a midwife in the case of a female student or as a general nurse in the case of a male student.

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Duration: At least three years.

Baccalaureus Curationis (Instructionis et Administrationis): B.Cur.(I.et A.)	(UNorth)
Baccalaureus Curationis (Institutionis et Administrationis): B.Cur.(I. et A.)	(UPE)
Bachelor of Nursing (Teaching and Administration): B.Cur. (I. et A.) (UP)	
Bachelor of Nursing Education and Administration: B.Cur. (Ed. et Adm.) (RAU)	

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) and proof of registration as a nurse/male nurse with the SA Nursing Council.

Additional requirements:

The University of the North requires proof of registration as a general nurse and mid= wife, or a general nurse/male nurse and psychiatric nurse/male nurse; and at least 18 months' experience as a registered nurse/male nurse in hospital or extra-institutional health services.

Port Elizabeth: A candidate who wishes to take Promotive and Preventive Health Care II with a view to recognition by the SA Nursing Council as a Community Health Nurse, must submit proof of registration as a midwife or, in the case of males, as a general nurse and, if possible, psychiatric nurse.

Pretoria, Rand Afrikaans University: Candidates who wish to take Public Health Nursing II (Pretoria) or Community Health Nursing (RAU) must also be registered as a midwife, or, in the case of males, as a general nurse and psychiatric nurse.

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

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 of Nursing : B.Nursing Hons. (US) Honours Bachelor of Arts in Nursing Science : Hons.B.A.(Cur.) (UNISA) Honours Baccalaureus Curationis : B.Cur.Hons. (UWC)

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, UWC) Magister Artium et Scientiae (Nursing): M.Art. et Scien. (Nursing) (PU for CHE) Master of Nursing: M.Cur. (UP, RAU) or M. Nursing (US) Master of Arts in Nursing Science: M.A. (Cur.) (UNISA) Master of Science in Nursing: M.Sc.(Nursing) (UW)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UN, UW) Doctor of Social Science: D.Soc.Sc. (UN) Doctor Societatis Scientiae in Nursing: D.Soc.Sc.(Nursing) (UOFS) Doctor Curationis: D.Cur (UPE, UWC) Doctor Philosophiae: D.Phil. (PU for CHE) Doctor of Nursing: D.Cur. (UP, RAU) Doctor of Literature and Philosophy: D.Litt. et Phil, (UNISA) Doctor of Nursing : D.Nursing (US) DIPLOMAS /

<u>Diploma in Nursing</u> (General, Midwifery, Psychiatry) (UOFS)

Admission: A Senior Certificate with passes in at least four subjects on the Higher Grade; and proof of enrolment as a student nurse at a training hospital approved by the SA Nursing Council.

Duration: Four years of full-time study.

Diploma in Nursing Education (UCT, UNorth, UP, US, UWC, UW)

University Diploma in Nursing Education (UN)

Diploma in Nursing Education and Community Health Nursing : Dip. N.E. (UPE)

Diploma in Nursing Tuition (RAU)

Admission:

Cape Town: Matriculation Certificate or equivalent approved by the Senate and proof of registration with the SA Nursing Council as a general nurse. Mathematics on the Std 10 level is not a prerequisite for admission, but is very strongly recommended.

Natal: A Senior Certificate; proof of registration as a general nurse or a general nurse (male) with the SA Nursing Council and at least two years' satisfactory nursing expe= rience.

North: An acceptable senior school-leaving certificate. Applicants will be selected on merit according to their Matriculation/Senior Certificate subjects and symbols; Mathematics and/or Physical/General Science will be a recommendation; proof of regis= tration as a general nurse and midwife, or a general nurse (male) and psychiatric nurse (male); and at least 18 months' experience as a registered nurse/male nurse in a hos= pital or in extra-institutional health services.

Port Elizabeth: A Senior Certificate and proof of registration with the SA Nursing Council as a general nurse and a midwife, or in the case of male candidates, as a ge= neral nurse plus any other post-basic registration. A candidate who wishes to take Psychiatric Nursing as a teaching subject, must produce proof of registration as a psychiatric nurse.

Pretoria: A Senior Certificate and proof of registration as a general nurse/male nurse or a psychiatric nurse/male nurse. A candidate who wishes to take Midwifery or Psychia= tric Nursing must be registered as a midwife or as a psychiatric nurse.

Rand Afrikaans University: A Senior Certificate and proof of registration as a nurse. A candidate who wishes to take Midwifery or Psychiatric Nursing as a teaching subject must submit proof of registration as a midwife or as a psychiatric nurse.

Stellenbosch: A Senior Certificate; a certificate of registration with the SA 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.

Western Cape: A Senior Certificate; a certificate of current registration as a general nurse with the SA Nursing Council; and 18 months' experience as a registered nurse in the relevant branch of nursing of which one year was spent in the clinical departments of a recognised training school for student nurses; on condition that any period of training for another certificate is not recognised as part of the 18 months.

Witwatersrand: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). The candidate must be registered by the SA 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 Bache= lor's degree in Nursing will be required to have been engaged in the practice of nurs= ing for at least one year in a training institution. Duration: One and a half years of full-time study (Natal, Pretoria, Rand Afrikaans Uni= versity, Witwatersrand); two years of full-time study (Cape Town, North, Port Elizabeth, Stellenbosch, Western Cape). The period of study may be shortened by some universities for candidates who hold a Bachelor's degree in Nursing.

Post-Basic Diplomas in Nursing (UOFS)

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 Senior Certificate and proof of registration as a general nurse/general nurse (male) or a psychiatric nurse.

Admission to (iii): Proof of registration as a general nurse/general nurse (male) and a midwife or an orthopaedic nurse.

Duration: One year of full-time study.

Diploma in Nursing Education (graduated) (PU for CHE)

Admission: A degree in Nursing.

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

Diploma in Nursing Administration (UNorth, UP, RAU, UWC, UW)

Admission:

North, Pretoria, Rand Afrikaans University: A Senior Certificate and proof of registra= tion as a general nurse/male nurse or as a psychiatric nurse/psychiatric nurse (male).

Western Cape: A Senior Certificate; a certificate of current registration as a general nurse or a psychiatric nurse; and five years' experience as a registered nurse.

Witwatersrand: Matriculation Certificate or a Senior Certificate (Matriculation Exemp= tion). 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 insti= tution for nurses.

Duration: One year of full-time study.

Diploma in Nursing Administration and Community Health Nursing (UPE, RAU)

Admission:

Port Elizabeth: A Senior Certificate and proof of registration as a general nurse and as a midwife or, in the case of males, as a general nurse plus any other post-basic registration.

Rand Afrikaans University: A Senior Certificate and proof of registration as a midwife in the case of females or as a psychiatric nurse in the case of males.

<u>Duration</u>: Three semesters of full-time study. At the University of Port Elizabeth candidates who are also registered as tutors or as Community Health Nurses may complete the course in one year and will be exempted from certain subjects according to the qua= lifications they hold.

Diploma in Advanced Nursing Science (UNISA),

Admission: A Senior Certificate and proof of registration as a general nurse/male nurse. A female student who takes Community Health Nursing Science II and/or Nursing Education II must be registered as a general nurse and as a midwife. This shall not apply in the case of a student from a foreign country.

Duration: At least two years.

Diploma in Advanced Clinical Nursing (US)

Admission: A Senior Certificate; proof of registration as a general nurse/male nurse and as a midwife or a psychiatric nurse (male); two years' experience as a registered nurse; and pass an admission examination which must be taken during September before commencement of the course.

Duration: One year of full-time study. The course commences on 1 January.

Diploma in Oncochemotherapy (Nursing) (UP)

Admission: Proof of registration as a general nurse/male nurse and an approved degree in Nursing or the Diploma in Nursing Education or the Diploma in General Nursing.

Duration: One academic year.

Diploma in Operating Theatre Technique (UWC)

Admission: A Senior Certificate; a certificate of current registration with the SA Nursing Council as a general nurse; proof of current SA Nursing Association membership; and at least six months' clinical experience in an approved operating theatre.

Duration: 18 months of full-time study. The course commences on 1 January.

OCCUPATIONAL THERAPY

Universities: Cape Town, Orange Free State, Stellenbosch, Witwatersrand

FIRST DEGREES

Bachelor of Science in Occupational Therapy: B.Sc. (Occ.Ther.) (UCT) Bachelor of Occupational Therapy: B.Occupational Therapy (UOFS, US) Bachelor of Science in Occupational Therapy: B.Sc.(O.T.) (UW)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) and a medical certificate.

Additional requirements:

Cape Town: A pass in Mathematics on the Standard Grade. A pass in Physical Science, Physics, Chemistry or Biology on the Standard Grade at least is recommended.

Stellenbosch: Prospective students are strongly advised to take Mathematics, Physical Science and/or Biology and/or Physiology for the Std 10 examination.

Witwatersrand: As for B.Sc. (Nursing). See p.122.

Duration: Four years of full-time study.

POST-GRADUATE DEGREES

Master of Science in Occupational Therapy: M.Sc. (0.T.) (UW) Doctor of Philosophy: Ph.D. (UW)

DIPLOMAS

Diploma in Advanced Occupational Therapy (UW)

Admission: A B.Sc. (0.T.) degree or equivalent degree; registration with the SA Medi= cal and Dental Council; and at least one year's experience as an occupational therapist. In an exceptional case, a person who is registered with the SA Medical and Dental Coun= cil as an occupational therapist may be admitted by virtue of his holding a recog= nised diploma in occupational therapy and who has had at least two years' experience as an occupational therapist in a recognised institution.

Duration: Two academic years of part-time study.

Teachers' Diploma in Occupational Therapy (UP)

Admission: A qualification in Occupational Therapy which is accepted by the SA Medical and Dental Council for registration and recognised by the College for Occupational The= rapy as sufficient basic training for admission, and at least two years' experience as a registered occupational therapist in an approved hospital.

Duration: One year of full-time study.

Teachers' Diploma in Occupational Therapy (US)

<u>Admission</u>: Matriculation Certificate or a Senior Certificate (Matriculation Exemption); a qualification in Occupational Therapy which is accepted by the SA Medical and Dental Council for registration and approved by the South African Association of Occupational Therapists; and at least two years' uninterrupted experience as an occupational thera= pist in an approved hospital.

Duration: Two years of full-time study.

Diploma for Therapists (Special Education): D.T.S.E. (UNISA) See EDUCATION p.89.

OPTOMETRY

University: North

FIRST DEGREE

Bachelor of Optometry: B.Optom.

Admission: As for the B.Sc. degree. See p. 135.

Duration: Four years of full-time study. The training for this degree will lead to registration with the SA Medical and Dental Council as an optometrist.

ORAL HYGIENE

Universities: Pretoria, Stellenbosch, Western Cape, Witwatersrand

DIPLOMAS

Diploma in Oral Hygiene (UP, US, UW)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Pretoria: Passes in Biology/Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade. Mathematics will be a recommendation. Candidates are se= lected.

Stellenbosch: Preference will be given to students who have obtained passes on the Stan= dard Grade in the following subjects: Mathematics, Physical Science, Biology and/or Physiology. Students are selected and applications must be submitted before 30 June of the previous year.

Duration: Two years of full-time study.

Diploma in Oral Hygiene (UWC)

Admission: A Senior Certificate. Preference will be given to students with either Chemistry, Physical Science and/or Mathematics as one or more of the examination subjects. Candidates are selected.

Duration: Two years of full-time study.

PARKS AND RECREATION ADMINISTRATION

University: Stellenbosch

FIRST DEGREE

Bachelor of Parks and Recreation Administration : B. in Parks and Recreation Administra=

Admission: As for B.Sc. in Forestry. See p. 100.

Duration: Four years of full-time study.

PEDOLOGY (SOIL SCIENCE)

University: Potchefstroom

FIRST DEGREE

Baccalaureus Scientiae (Pedology): B.Sc.(Ped.)

Admission: The B.Sc. degree with Pedology as one of the major subjects.

Duration: One year.

POST-GRADUATE DEGREES

Honours Baccalaureus Scientiae (Pedology): Honns. B.Sc. (Ped.) Magister Scientiae (Pedology): M.Sc. (Ped.) Doctor Scientiae (Pedology): D.Sc.(Ped.)

PERSONNEL LEADERSHIP/MANAGEMENT

The University of Cape Town offers Personnel Management as one of the special fields for the B.Bus.Sc. degree (see p. 62).

The Universities of Durban-Westville and Pretoria offer Personnel Management as one of the options for the B.Com degree (see p. 65).

The University of Port Elizabeth offers Industrial and Organizational Psychology (Personnel Management) as one of the curricula for the B.Com. degree (see p. 65).

Universities: Cape Town, Fort Hare, Orange Free State, Witwatersrand

FIRST DEGREES

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

<u>Admission</u>: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Duration: Three years of full-time study.

The University of Fort Hare also offers Personnel Management as an option for the B. Admin. degree (see p. 48).

Bachelor of Personnel Leadership: B.P.L. (UOFS)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Candidates are selected.

Duration: Three years of full-time study.

HONOURS DEGREES

Bachelor of Arts in Personnel Management (Honours) : B.A. (Personnel Management) (Hons.) (UFH)

Honours Bachelor of Personnel Leadership : B.P.L. Hons. (UOFS)

MASTER'S DEGREES

Master of Arts in Personnel Management : M.A. (Personnel Management) (UFH)

Master of Personnel Leadership : M.P.L. (UOFS)

Master in Personnel Management : M.P.M. (UW)

<u>Admission</u>: A degree plus the Higher Diploma in Personnel Management or equivalent post-` graduate qualification or an Honours degree in a subject which in the opinion of the Senate is cognate to the subject of personnel management.

Duration: One year of full-time advanced study and research on an approved subject plus a dissertation.

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UW)

Doctor of Personnel Leadership : D.P.L. (UOFS)

DIPLOMAS

Post-graduate Diploma in Personnel Management and Manpower Development (UCT)

Admission: A Graduate.

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

Advanced Diploma in Personnel Management and Manpower Development : Adv.Dip.Pers.Mgt. (UCT)

Admission: A non-graduate with approved professional qualifications and/or several years of approved business experience.

Duration: The regulations for the Advanced Diploma are the same as that for the Postgraduate Diploma.

Higher Diploma in Personnel Management: H.Dip.Pers.Man. (UW)

Admission: A graduate in any faculty, or a non-graduate who holds a professional qua= Tification, or, in exceptional cases the Senate may admit a person whose admission is warranted by virtue of his experience, qualifications and abilities.

Duration: One year of full-time study.

PHARMACY

Universities: Durban-Westville, North, Potchefstroom, Rhodes, Western Cape

FIRST DEGREES

Bachelor of Pharmacy : B.Pharm. (UDW, UNorth, RU) Baccalaureus Pharmaciae : B.Pharm. (PU for CHE)

Baccalaureus Pharmaceuticae : B.Pharm. (UWC)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

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Additional requirements:

Durban-Westville: As for the B.Sc. degree. See p. 135.

North: As for the B.Sc. degree. See p. 135.

Potchefstroom: Passes in Mathematics and a science subject, preferably Physical Science, on the Standard Grade at least.

Rhodes: A pass in Mathematics on at least the Standard Grade.

Western Cape: As for the B.Sc. degree (see p. 136) and a pass in a science subject other than Mathematics as an additional requirement.

Duration: Four years of full-time study.

Before admission to the second year of study, a student must submit proof of his re= gistration as a pharmacy student with the SA Pharmacy Board. A student may only be registered as a pharmacist after the completion of his/her apprenticeship as determined by the SA Pharmacy Board.

HONOURS DEGREES

Honours Bachelor of Science (Pharmacy): B.Sc.Hons.(Pharm.) (UNorth) Honours Baccalaureus Pharmaciae : Honns.B.Pharm. (PU for CHE)

MASTER'S DEGREES

Master of Pharmacy : M.Pharm. (UDW, UNorth) Magister Pharmaciae : M.Pharm. (PU for CHE) Master of Science : M.Sc. (RU) Magister Pharmaceuticae : M.Pharm. (UWC)

DOCTOR'S DEGREES

Doctor of Pharmacy : D.Pharm. (UDW, UNorth) Doctor Pharmaciae : D.Pharm. (PU for CHE) Doctor of Philosophy : Ph.D. (RU) Doctor of Science : D.Sc. (RU) Doctor Pharmaceuticae : D.Phar. (UWC)

DIPLOMA

University Diploma in Pharmacology (PU for CHE)

Admission: B.Pharm. degree or the degree of M.B., Ch.B. or an equivalent qualification. Duration: One year of full-time or part-time study.

PHYSICAL EDUCATION

Universities: Durban-Westville, Orange Free State, Port Elizabeth, Potchefstroom, Pretoria, Rhodes, Stellenbosch

FIRST DEGREES

Baccalaureus Artium in Physical Education : B.A.(Phys.Ed.)(UDW)Baccalaureus Artium (Physical Education): B.A.(Physical Education)(UOFS)Baccalaureus Artium with Physical Education as a major subject : B.A.(PU for CHE, US)Bachelor of Arts in Physical Education : B.A. (Phys.Ed.)(UP)Bachelor of Arts (Physical Education) : B.A.(Phys.Ed.)(RU)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). A medical certificate is required.

Additional requirements: As for the B.A. degree. See p. 55.

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.

Baccalaureus Physicalis Educationis : B.Phys.Ed. (UPE)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). All prospective student teachers are selected. A satisfactory medical report is re= quired.

Duration: Four years of full-time study.

Baccalaureus Scientiae with Physical Education as a major subject : B.Sc. (PU for CHE, US)

Admission: As for the B.Sc. degree. See p. 135. 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.) (UP) Admission: As for the B.A. degree. See p.55. Students are selected. Duration: Four years of full-time study. (US)B. degree course in Primary Education with specialisation in Physical Education See EDUCATION p. 91. HONOURS DEGREES Honoris Baccalaureus Artium in Physical Education: B.A.(Phys.Ed.) Hons. (UDW) Honneurs Baccalaureus Artium (Physical Education) : B.A.Hons.(Phys.Ed.) (UOFS) Baccalaureus Physicalis Educationis Honores : B.A.Phys.Ed. (UPE) Honneurs Baccalaureus Artium : Honns. B.A. (PU for CHE) Honneurs Baccalaureus Scientiae : 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) Hons.B. in Physical Education (US) MASTER'S DEGREES Magister Artium in Physical Education: M.A.(Phys.Ed.) (UDW) Magister Artium (Physical Education): M.A. (Phys.Ed.) (UOFS) Magister Physicalis Educationis: M.Phys.Ed. (UPE) Magister Artium : M.A. (PU for CHE) Magister Scientiae : M.Sc. (PU for CHE) Master of Arts in Physical Education: M.A. (Phys.Ed.) (UP) Master of Arts : M.A. (RU) M. in Physical Education (US) DOCTOR'S DEGREES Doctor Philosophiae: D.Phil. (UDW, UOFS, PU for CHE, UP) Doctor Physicalis Educationis : D.Phys.Ed. (UPE) (PU for CHE) Doctor Scientiae : D.Sc. Doctor of Philosophy : Ph.D. (RU) (US) Doctor of Philosophy (Physical Education) : Ph.D. (Physical Education) DIPLOMA Diploma in Sports Coaching and Recreation (US) Admission: A limited number of selected, medically fit persons who hold recognised teaching qualifications. Duration: One year of full-time study. The following universities offer a four-year teacher's diploma course with Physical Education as one of the specialisations: Fort Hare (three-year diploma) (see p. 79),

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Orange Free State (see p. 81), Port Elizabeth (see p. 82), Pretoria (see p. 85), Rand Afrikaans University (see p. 87), Stellenbosch (see p. 90), Witwatersrand (see p. 93).

PHYSIOTHERAPY

Universities: Cape Town, Durban-Westville, Orange Free State, Stellenbosch, Witwaters= rand

FIRST DEGREES

Bachelor of Science (Physiotherapy): B.Sc.(Phys.) (UCT)

Baccalaureus Scientiae in Physiotherapy: B.Sc.(Physio.) (UDW, UOFS)

Bachelor of Science in Physiotherapy : B.Sc. in Physiotherapy (US)

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Additional requirements:

Cape Town: As for the B.Nursing degree. See p. 121.

Durban-Westville: As for the B.Sc. degree. See p.135.

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. 122.

Duration: Four years of full-time study.

MASTER'S DEGREES

Magister Scientiae in Physiotherapy : M.Sc.(Physiotherapy) (UOFS) Master of Science in Physiotherapy : M.Sc. in Physiotherapy (US) or M.Sc. (Physio= therapy) (UW)

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UW)

DIPLOMAS

Diploma in Advanced Physiotherapy (UW)

Admission: A B.Sc. (Physiotherapy) degree or an equivalent degree; registration with the SA Medical and Dental Council; and at least one year's experience as a physiothe= rapist. In an exceptional case, a person who is registered with the SA Medical and Dental Council as a physiotherapist by virtue of his holding a recognised diploma in physiotherapy and who has had at least two years' experience as a physiotherapist in a recognised institution may be admitted.

Duration: One and a half years of full-time study.

DIPLOMAS

<u>Diploma in Teaching Physiotherapy</u> (UCT) <u>Tertiary Education Diploma in Physiotherapy</u> (UOFS) Diploma in Physiotherapy Education (UP, UW)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption); a qualification in Physiotherapy which is accepted for registration with the SA Medical and Dental Council; and at least two years' approved experience in the practice of Phy= siotherapy.

Duration: One year of full-time study (Cape Town, Pretoria) or three semesters of parttime study or two semesters of full-time study (Orange Free State) or two years of parttime study (Witwatersrand).

Diploma in the Teaching of Physiotherapy (UDW)

Admission: The National Diploma in Physiotherapy.

Duration: Two years of full-time study.

Diploma in Intensive Care Physiotherapy (UCT)

Admission: As for the Diploma in Teaching Physiotherapy.

Duration: One year of full-time study.

Diploma for Therapists (Special Education) : D.T.S.E. (UNISA) See EDUCATION p.89.

POLICE SCIENCE

University: South Africa

DEGREE

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

<u>Admission</u>: Matriculation Certificate or a Senjor Certificate (Matriculation Exemption). Duration: Three years.

DIPLOMA

Diploma for Police (UNISA)

Admission: A Senior Certificate.

Duration: Three years.

PURE SCIENCE

Universities: All the universities in the Republic of South Africa

FIRST DEGREES

Bachelor of Science : B.Sc. (UCT, UFH, UN, UNorth, UP, RAU, RU, UNISA, US, UW, UZ) Baccalaureus Scientiae : B.Sc. (UDW, UOFS, UPE, PU for CHE, UWC) Admission: Matriculation Certificate or a Senior 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.
- 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 in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade and a pass in Biology or Physical Science on the Higher Grade or at least 50 per cent on the Standard Grade.

Fort Hare: A pass in Mathematics. A student will not be admitted to Mathematics I un= less he has obtained at least 40 per cent in Mathematics in the matriculation or equiva= lent examination. A student will not be admitted to Statistics I unless he has obtained a pass 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 Se= lection Scale which is based on the results of the matriculation examination.

Selection Scale

The rating of a candidate is compiled as follows:

2 x Mathematics mark

plus 1½ 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

For symbols of subjects on the Higher Grade add one extra mark.

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

- Mathematics I, Statistical Methods I, Applied Mathematics I, any course in Theory of Structures : A pass of at least 40 per cent in Mathematics on the Standard Grade.
- Computer Science I, Commercial Computer Science I, Mathematics for Economists : A pass in Mathematics on the Standard Grade.

Potchefstroom: A pass in Mathematics on the Higher Grade, <u>or</u> passes in a natural science subject, preferably Physical Science, and Mathematics on the Standard Grade. For ad= mission to Mathematics I a student must have obtained a pass in Mathematics on the High= er Grade or at least 50 per cent on the Standard Grade.

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, Biological Science, Chemistry, Entomology, Genetics, Geology, Metallurgy, Microbiology, Physics, Physiology, Zoology.
- Computer Science, Mathematics, Mathematical Statistics, Applied Mathematics: A candidate will not be admitted to these courses unless he passed Mathematics on the High= er Grade or obtained at least 50 per cent on the Standard Grade.
- For Biological fields of study Biology is recommended as a Matriculation subject.

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 in exceptional cases be admitted to the course in Mathema= tics after a test set by the Department of Mathematics has been passed.
- 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 with an F symbol on the Higher Grade or an E symbol on the Standard Grade.

Additional requirements in respect of certain courses

- Chemistry I : A pass in Physical Science on the Standard Grade.
- Mathematics IA : A pass in Mathematics with an E symbol on the Higher Grade or a D symbol on the Standard Grade.
- Physics I : A pass in Physical Science or Physics with an F symbol on the Higher Grade or an E symbol 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.

Students who intend to take a course in Chemistry and/or Physics are strongly recommended to take Physical Science for the Std 10 examination. Should a student wish to take Botany and/or Zoology, he is strongly recommended to take Biology, besides Physical Science, for the Std 10 examination.

Western Cape: A pass of at least 40 per cent in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade.

Witwatersrand:

- A pass in Mathematics on the Higher Grade or at least 60 per cent on the Standard Grade
- A pass on the Higher Grade in one of the subjects in List A below if Mathematics has been passed on the Higher Grade, or if Mathematics has been passed on the Standard Grade, either two of the subjects in List A below or one of the subjects in List A and one of the subjects in List B below:

List A	List B
Biology Geography Physical Science Physiology	French German Hebrew History Latin

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.

Duration: Three years of full-time study or four years of part-time study. At UNISA the degree must be obtained within ten years of the student's first registration for the degree.

See Appendix VII (p. 219) for list of major subjects for B.Sc. offered in the Faculty of Science by the various universities.

HONOURS DEGREES

Bachelor of Science (Honours) : B.Sc.(Hons.) (UCT, UFH, UP) or B.Sc.Hons. (UN) Honoris Baccalaureus Scientiae : B.Sc.(Hons.) (UDW) Honours Bachelor of Science : B.Sc.Hons. (UNorth, RAU, US) or Hons.B.Sc. (UNISA, UZ)

Honours Baccalaureus Scientiae : B.Sc.(Hons.) (UOFS) or Honns.B.Sc. (PU for CHE) or B.Sc.Hons. (UWC)

Baccalaureus Scientiae Honores : B.Sc.Hons. (UPE)

Bachelor of Science with Honours : B.Sc.(Hons.) (RU) or B.Sc.Hons. (UW)

MASTER'S DEGREES

Master of Science : M.Sc. (UCT, UFH, UN, UNorth, UP, RAU, RU, UNISA, US, UW, UZ) Magister Scientiae : M.Sc. (UDW, UOFS, UPE, PU for CHE, UWC)

Magister Philosophiae : M.Phil. (RAU)

Admission: A student may be admitted if his proposed study is of such a multidiscipli= nary or interdisciplinary nature that it does not fall exclusively under one faculty, and provided that he holds an Honours degree which, with or without other qualifica= tions, provides adequate grounding for the proposed study for a Master's degree.

Duration: Two semesters of full-time study or four semesters of part-time study. A dissertation or a paper with a study report is required.

DOCTOR'S DEGREES

Doctor of Philosophy : Ph.D. (UCT, UN, UNorth, RU, UNISA, US, UW) Doctor of Science : D.Sc. (UCT, UFH, UN, UP, RAU, RU, US, UW, UZ) Doctor Scientiae : D.Sc. (UDW, UOFS, UPE, PU for CHE, UWC) Philosophiae Doctor : Ph.D. (UPE) Doctor Philosophiae : Ph.D. (RAU)

DIPLOMA

Diploma in Applied Chemistry : D.A.C. (UFH)

Admission: A Bachelor's degree with Chemistry as a major subject.

Duration: One year of full-time study.

Post-graduate Diploma in Geohydrology (UOFS)

Admission: A B.Sc. or a B.Sc.(Eng.) degree which includes one of the following subjects on third-year level: Geology, Mathematics, Physics, Chemistry, Applied Mathematics, Mathematical Statistics, Computer Science.

Duration: Two semesters.

See EDUCATION (p. 77) for degree and diploma courses for teacher training in the field of Science.

QUANTITY SURVEYING

<u>Universities</u>: Cape Town, Natal, Orange Free State, Port Elizabeth, Pretoria, Witwaters= rand

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FIRST DEGREES

Bachelor of Science (Quantity Surveying):B.Sc.(Q.S.)(UCT)Bachelor of Science in Quantity Surveying:B.Sc.(Q.S.)(UOFS)Baccalaureus Scientiae in Quantity Surveying:B.Sc.(Q.S.)(UPE)Bachelor of Quantity Surveying:B.Sc.(Q.S.)(UP)

Admission: As for the B.Arch. degree. See p. 54.

Duration: Five years. Two years of full-time study and three years of part-time study (Orange Free State, Pretoria) or three years of full-time study and two years of parttime study (Cape Town, Port Elizabeth). A candidate must be employed full-time in the office of a registered quantity surveyor during the period in which he is studying parttime.

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

Admission: As for the B.Arch. degree. See p. 54.

Duration: Four years of full-time study.

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

Admission: As for the B.Arch. degree. See p. 54.

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.

MASTER'S DEGREES

Master of Science in Quantity Surveying: M.Sc.(Q.S.) (UOFS, UW) or M.Sc.Q.S. (UN) Magister Scientiae in Quantity Surveying: M.Sc.(Q.S.) (UPE) Master of Quantity Surveying: M.Sc.(Q.S.) (UP)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UN, UW) Philosophiae Doctor in Quantity Surveying: Ph.D. (UPE) Doctor of Quantity Surveying: D.Sc.(Q.S.) (UP) Doctor of Science in Quantity Surveying: D.Sc.(Q.S.) (UW) or D.Sc.Q.S. (UN)

RADIOGRAPHY

Universities: Orange Free State, Pretoria

FIRST DEGREE

Bachelor of Radiography: B.Rad. (UP)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) with a pass in Mathematics and either Physical Science or Biology on the Higher Grade or

at least 50 per cent on the Standard Grade. A pass in both Physical Science and Biology is preferable.

With a view to selection each candidate must take a preliminary course in nursing for five weeks at the H.F. Verwoerd Hospital.

Each student must apply for registration with the SA Medical and Dental Council as a student in Radiography immediately after admission to the first year of study.

Duration: Three years of full-time study. During this period each candidate must be attached to the Department of Radiodiagnosis of the H.F. Verwoerd Hospital as a student radiographer.

HONOURS DEGREE

Bachelor of Radiography (Honours) : B.Rad.(Hons.) (UP)

Admission: The B.Rad. degree or the three-year Diploma in Radiographic Diagnosis.

Duration: One year of full-time study.

DIPLOMAS

<u>Diploma in Diagnostic Radiography</u> and Diploma in Therapeutic Radiography (UOFS)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) or a recognised Senior 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 Radiation Protection for Sisters (UP)

Admission: A Senior Certificate and the status of a Sister in a general hospital.

Duration: One year of full-time study.

Diploma in Teaching Radiography (UCT)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption); a qualification in the approved branch of Radiography which is registrable with the SA Medical and Dental Council; and at least four years' experience in the appropriate branch of Radiography.

Duration: One year of full-time study.

SOCIAL SCIENCE

Universities: Cape Town, Natal, Orange Free State, Rhodes

FIRST DEGREES

Bachelor of Social Science: B.Soc.Sc. (UCT, UN, RU) Baccalaureus Societatis Scientiae: B.Soc.Sc. (UOFS)

Admission: Matriculation Certificate or a Senior 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. 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) Honneurs-Baccalaureus Societatis Scientiae: B.Soc.Sc.(Hons.) (UOFS) MASTER'S DEGREES Master of Social Science: M.Soc.Sc. (UCT, UN, RU) Magister Societatis Scientiae: M.Soc.Sc. (UOFS) DOCTOR'S DEGREES Doctor of Philosophy: Ph.D. (UCT. UN. RU) Doctor of Social Science: D.Soc.Sc. (UCT, UN, RU) Doctor Societatis Scientiae: D.Soc.Sc. (UOFS) DIPLOMAS Diploma in Applied Social Sciences (UN) Admission: A graduate who has completed a major in one or more of the following sub=

Admission: A graduate who has completed a major in one or more of the following sub= jects: Business Administration, Comparative African Government and Administration, Eco= nomic History, Economics, Geography, History, Industrial Psychology, Industrial Socio= logy, Philosophy, Political Science, Psychology, Social Anthropology, Social Work, So= ciology, Town and Regional Planning.

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

Diploma in Social Studies (RU)

Admission: A Senior Certificate.

Duration: Two years of full-time study. The Diploma offers only general training in Social Science.

SOCIAL WORK

Universities: All the universities in the Republic of South Africa

FIRST DEGREES

Bachelor of Social Science in Social Work:B.Soc.Sc.(S.W.)(UCT)Baccalaureus Artium in Social Work:B.A.(S.W.)(UDW, UPE)Bachelor of Arts in Social Work:B.A. (S.W.)(UFH, UP, RAU, US)or B.A. (Social Work)(UW)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)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Duration: Four years of full-time study.

Bachelor of Arts in Social Work : B.A.(S.W.) (UNorth, UZ)

Baccalaureus Artium in Social Work : B.A.(S.W.) (UWC)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

Duration: Three years of full-time study.

For University of Natal see Social Science p. 139.

Bachelor of Arts in Social Science : B.A.(S.S.) (UNISA)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). A student shall be admitted only with the special permission of the Senate, and only after having submitted evidence that arrangements for practical work at an approved or= ganization can be made and that supervision will be carried out by a suitable person.

Duration: At least four years.

HONOURS DEGREES

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.(S.W.)(Hons.) (UFH) Bachelor of Social Science (Honours) : B.Soc.Sc.Hons. (UN) Bachelor of Arts Honours in Social Work: B.A.Hons.(S.W.) (UNorth) 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 Bachelor of Arts in Social Work: B.A. Social Work Hons. (US) or Hons. B.A. (S.W.) (UZ) Honours Bachelor of Arts in Social Work (Medical Social Work field) : B.A. Social Work (Medical Social Work field) (Hons.) (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) Magister Artium in Social Work: M.A.(S.W.) (UDW, UWC) (UFH, UNorth, UP, RAU, UZ) or M.A. (Social Master of Arts in Social Work: M.A.(S.W.) Work) (UW) Magister Societatis Scientiae in Social Work: M.Soc.Sc.(S.W.) (UOFS) Magister Societatis Scientiae (Clinical Psychology): M.Soc.Sc.(Clinical Psychology) (UOFS) (UPE, PU for CHE) Magister Artium: M.A. Master of Arts in Social Science: M.A.(S.S.) (UNISA) Master of Arts in Social Science in Mental Health: M.A.(S.S.)(Mental Health) (UNISA) Master of Arts in Social Work: 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 in Social Work: D.Soc.Sc.(S.W.) (UOFS) Doctor of Literature and Philosophy: D.Litt.et Phil. (RAU) Doctor of Literature : D.Litt. (UW)

DIPLOMAS

Diploma in Social Science (Social Work): Dip.Soc.Sc.(S.W.) (UCT)

Admission: A Senior Certificate.

Duration: Three years of full-time study.

<u>Diploma in Social Work : Dipl. S.W</u>. (UNorth) Diploma in Social Work (UWC)

Admission: A Senior Certificate.

<u>Duration</u>: Three years of full-time study. The curriculum is the same as that laid down for the degree of B.A.(S.W.) according to the university offering the diploma course.

Diploma in Social Work (UOFS, PU for CHE, RU)

Admission: A Senior Certificate.

Duration: Four years of full-time study.

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 (UFH)

Admission: A Senior Certificate; or at least 25 years of age and a standard of educa= tion 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 (UCT)

Admission: An Honours degree in Psychiatric Social Work or its recognised equivalent.

Duration: A half-year of prescribed field and clinical practice together with specified written study assignments.

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Advanced Diploma in Social Work (UOFS)

Admission: A recognised university Diploma in Social Work.

Duration: One year of full-time study.

The curriculum is the same as that laid down for the degree of B.Soc.Sc.(Hons.) in So= cial Work.

Advanced Diploma in Social Work (Supervision) (US)

Admission: A Bachelor's degree in Social Work or an approved Diploma in Social Work. Candidates must have been in Social Work practice for at least three years. Selection is done by means of a personal interview. Not more than 6 and not less than 3 students are admitted to the course each year.

Duration: One year of full-time study.

Higher Diploma in Social Work (UWC)

Admission: A Diploma in Social Work.

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

The curriculum is the same as that laid down for the degree of B.A.Hons.(S.W.).

Higher Diploma in Advanced Social Work Practice (UW)

Admission: A B.A. degree in Social Work.

Duration: Two years of part-time study.

Higher Diploma in Community Organisation (UZ)

Admission: The degree of B.A.(S.W.) or the Diploma in Social Work.

Duration: One year.

SPEECH THERAPY AND AUDIOLOGY/LOGOPAEDICS

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

FIRST DEGREES

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

Baccalaureus Artium in Speech and Hearing Therapy : B.A. (Speech and Hearing Therapy) (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)

Admission: Matriculation Certificate or a Senior 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. 55) and preferably with passes in Mathematics as well as Biology and/or Physics.

Witwatersrand: As for the B.A. degree (see p. 56) with a pass in Mathematics on the Higher Grade or at least 50 per cent on the Standard Grade.

Duration: Four years of full-time study.

MASTER'S DEGREES

Magister Artium in Speech and Hearing Therapy: M.A. (Speech and Hearing Therapy) (UDW) Master of Arts in Speech Therapy and Audiology: M.A.(Log.) (UP) 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)

DIPLOMA

Diploma for Therapists (Special Education): D.T.S.E. (UNISA) See EDUCATION p.89.

TAXATION

University: Cape Town

DIPLOMA

Advanced Diploma in Taxation: Adv.Dip.Tax.

Admission: A graduate or a non-graduate who holds an approved professional qualifica= tion.

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

TEXTILE SCIENCE

University: Port Elizabeth

FIRST DEGREE

Magister Scientiae in Textile Science: M.Sc. in Textile Science

Admission: A candidate must hold one of the following minimum qualifications:

- B.Sc.(Textile) degree

- Diploma in Textile Engineering equivalent to a B.Sc.Hons. degree
- B.Sc.Hons. degree in Chemistry, Physics, Mathematics or Mathematical Statistics.

Duration: One of the following fields may be selected for research: Textile Chemistry, Textile Physics, Mechanical Processing, Textile Engineering.

All candidates should be employed by a well-established textile laboratory having the necessary research facilities.

DOCTOR'S DEGREE

Philosophiae Doctor in Textile Science: Ph.D. in Textile Science.

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 Uni= versity also offer curricula for the B.A.Admission degree.

FIRST DEGREES

Baccalaureus Theologiae : B.Theol. (UDW)

Bachelor of Theology : B.Theol. (UFH, UNorth, UZ)

Bachelor of Theology : Th.B. (RU)

Bachelor of Theology : B.Th. (UNISA)

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption).

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

Bachelor of Arts: B.A. (UN)

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. (UDW) Bachelor of Divinity : B.D. (UNorth, UNISA, UZ)

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. (PU for CHE)

Admission: B.A. degree with courses in Semitic Languages, 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. (UP)

Admission

- Faculty of Theology Division A Dutch Reformed Church of Africa (Ned. Hervormde Kerkvan Afrika): A Bachelor's degree and credit for Latin I or IB, Biblical Studies II or Philosophy II, Greek II and Hebrew II.
- Faculty of Theology Division B Dutch Reformed Church (Nederduits Gereformeerde Kerk): A Bachelor's degree and credit for Biblical Studies I, Latin Special or German IB, Greek II (including New Testament Greek) and Hebrew II.

Duration: Three years of full-time study.

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Bachelor of Divinity: B.D. (RU)

Admission: The Th.B. degree or a Bachelor's degree in another faculty, preferably a B.A. degree with two major subjects from Biblical Studies, Systematic Theology and Eccle= siastical History.

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. (US)

Admission: A Bachelor's degree with Biblical Studies I, Hebrew II and Greek II (A or B) or an approved two-year course in Hebrew and Greek.

Duration: Three years of full-time study.

Baccalaureus Theologiae: B.Th. (UWC)

Admission: A student must have completed the Admission course successfully. The Admis= sion course is a two-year course for students who have obtained a Matriculation Certifi= cate or a Senior Certificate (Matriculation Exemption).

Duration: Three years of full-time study.

Licentiate in Theology (US, UWC)

Students who have obtained the B.Th. degree may be admitted to the fourth year course to obtain the Licentiate in Theology.

HONOURS DEGREES

Bachelor of Theology (Honours): B.Theol.(Hons.) (UFH) Bachelor of Arts (Honours): B.A.Hons. (UN) Honours Bachelor of Theology: Hons. B.Th. (UNISA)

MASTER'S DEGREES

Magister Divinitatis: M.Div. (UDW) Master of Theology: M.Theol. (UFH) or M.Th. (UNISA, US) Master of Divinity: M.Div. (UNorth) Theologiae Magister: Th.M. (PU for CHE) Magister Theologiae: M.Th. (UWC)

DOCTOR'S DEGREES

Doctor Divinitatis: D.D. (UDW) Doctor of Theology: D.Theol. (UFH) or D.Th. (UNISA, US) Doctor of Divinity: D.D. (UNorth, UP, RU, UZ) Theologiae Doctor: Th.D. (PU for CHE) Doctor Theologiae: D.Th. (UWC) Doctor of Philosophy: Ph.D. (RU)

CERTIFICATES AND DIPLOMAS

Certificate in Theology (UDW)

<u>Admission</u>: As determined by the Senate after consultation with the respective denomina= tions.

Duration: Three years of full-time study.

Certificate in Religious Knowledge (RU)

Admission: Mature non-matriculants.

Duration: Two years of full-time study.

Diploma in Theology (UFH, RU, UZ)

Admission: A Senior Certificate; Rhodes University admits mature non-matriculants sent to the university for training by their ecclesiastical authorities.

Duration: Three years or four years (UFH) of full-time study.

Diploma in Theology: Dipl. Theol. (UNorth)

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).

Diploma in Theology (UNISA)

Admission: A Senior Certificate or equivalent.

Duration: At least two years.

Diploma in Theology (UWC)

Admission: A Senior Certificate plus two-year Admission course.

<u>Duration</u>: Three years of full-time study. The curriculum is the same as for the B.Th. degree at the University of the Western Cape.

Post-graduate Diploma in Theology (UP)

Admission: A post-graduate Bachelor's degree in Theology (B.D.)

Duration: One year of full-time study.

A candidate who wishes to be trained as a minister of the Dutch Reformed Church (Ned. Geref. Kerk) must obtain this diploma.

TOWN AND REGIONAL PLANNING

Universities: Cape Town, Natal, Orange Free State, Potchefstroom, Pretoria, Stellen= bosch, Witwatersrand

FIRST DEGREES

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

Admission: Matriculation Certificate or a Senior 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. Students are selected.

Duration: Four years of full-time study.

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

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Candidates must obtain passes in Mathematics and Physical Science of

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- at least 50 per cent in the one on the Higher Grade and at least 40 per cent in the other on the Higher Grade; or
- at least 50 per cent in the one on the Higher Grade and at least 50 per cent in the other on the Standard Grade; or
- at least 40 per cent in the one on the Higher Grade and at least 60 per cent in the other on the Standard Grade; or
- at least 60 per cent in the one on the Standard Grade and at least 50 per cent in the other on the Standard Grade.

Duration: Four years of full-time study.

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

Admission: Matriculation Certificate or a Senior 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'S DEGREES

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

Admission: A Bachelor's degree.

Duration: Two years of full-time study.

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

Admission: A degree in Architecture.

Duration: Two years of full-time study.

Master of Town Planning : M.T.P. (UN)

Admission: A Bachelor's degree.

Duration: Two years of full-time study.

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

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 : M. of Town and Regional Planning (UOFS)

<u>Admission</u>: (i) Persons who hold a degree in Town and Regional Planning or a degree in a related field with a Diploma in Town and Regional Planning or other equivalent quali= fications.

(ii) Persons with little or no training in planning and related fields, but with a degree in an appropriate field or who hold other appropriate qualifications.

Duration: (i) One year of full-time study or two years of part-time study for those admitted under (i) above.

(ii) Two years of full-time study or three years of part-time study for those admitted under (ii) above.

Master of Town and Regional Planning : M. of Town and Regional Planning (US)

Admission: One of the following degrees:

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

Duration: Two years of full-time study.

Master of Arts and Science (Planning): M.Art. et Scien. (Planning) (PU for CHE) Master of Town and Regional Planning: M.Sc. (Town and Regional Planning) (UP) Master of Science in Town and Regional Planning : M.Sc. (T.R.P.) (UW) Master of Environmental Planning : M.E.P. (UW)

DOCTOR'S DEGREES

Doctor of Philosophy: Ph.D. (UCT, UN, UW) Doctor Philosophiae: D.Phil. (PU for CHE, US) Doctor of icon and Regional Planning : D.Sc. (Town and Regional Planning) (UP) Doctor of Town and Regional Planning : D. (T.R.P.) (UW) Doctor of Science in Town and Regional Planning : D.Sc. (T.R.P.) (UW)

DIPLOMAS

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

<u>Admission</u>: Matriculation Certificate or a Senior Certificate (Matriculation Exemption) or any other secondary school-leaving qualification deemed by the Senate to be satis= factory; 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. (UCT)

<u>Admission:</u> Matriculation Certificate or a Senior Certificate (Matriculation Exemption) or any other secondary school-leaving qualification deemed by the Senate to be satis= factory; and a diploma or professional qualification in Architecture approved by the Senate.

Duration: Two years of full-time study.

Higher Diploma in Planning for Developing Areas (UW)

Admission: A Bachelor's degree in Architecture, Town and Regional Planning, Building, Civil Engineering or Land Surveying or a B.A. or B.Sc. degree with three courses in Economics and/or Geography or other approved degree or equivalent qualification.

Duration: One year of full-time study.

TRANSLATION

Universities: Rhodes, South Africa

DEGREE

Bachelor of Arts (Translation) : B.A. (Trans.) (RU)

Admission: As for the B.A. degree. See p. 56.

Duration: Three years of full-time study.

DIPLOMAS

Post-graduate Diploma in Translation : Dip. Trans. (RU)

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 in Translation (UNISA)

Admission: A candidate must

- hold at least a Bachelor's degree; and
- have passed the third course in each of the two languages in which tuition in trans= lation is offered and in Linguistics I/General Linguistics I or an equivalent course; or
- have had at least two years' satisfactory experience as a translator in respect of the languages for which tuition is required with a recognised translation institution or organization.

The Department of Linguistics may require candidates to sit for a language and trans= lation test.

Duration: At least one academic year.

VETERINARY SCIENCE

University: Pretoria

FIRST DEGREE

Bachelor of Veterinary Science : B.V.Sc.

Admission: Matriculation Certificate or a Senior Certificate (Matriculation Exemption). Additional requirements are the same as for the B.Sc. degree. See p. 135.

Duration: Five and a half years of full-time study. Students are selected after pas= sing the first-year examinations.

POST-GRADUATE DEGREES

Bachelor of Veterinary Science (Honours): B.V.Sc.(Hons.) Master of Veterinary Medicine: M.Med.Vet. Doctor of Veterinary Science: D.V.Sc.

DIPLOMA

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.

WILD LIFE MANAGEMENT

University: Pretoria

FIRST DEGREE

Bachelor of Science in Wild Life Management (Honours) : B.Sc. (Wild Life Management) (Hons.)

Admission: Only a limited number of candidates are admitted annually. Written appli= cations for admission must be submitted to the Registrar (Academic) before 1 October each year. Candidates must hold a B.Sc., B.Sc.(Agric.), B.Sc. (Forestry) or B.V.Sc. degree. Candidates who hold a B.Sc. degree must have majored in at least one biological subject and must comply with such requirements as stipulated by the departmental head.

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

POST-GRADUATE DEGREES

Master of Science in Wild Life Management : M.Sc. (Wild Life Management) Doctor of Science in Wild Life Management: D.Sc. (Wild Life Management)

WOOD SCIENCE

University: Stellenbosch

FIRST DEGREE

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

Admission: As for B.Sc. in Forestry. See p. 100.

Duration: Four years of full-time study. After completion of their first year students can switch to the second year of study for the B.Sc. degree in Forestry. See p. 101.

POST-GRADUATE DEGREES

Honours Bachelor of Science in Wood Science: B.Sc.Hons. in Wood Science Master of Science in Wood Science: M.Sc. in Wood Science Doctor of Science in Wood Science: D.Sc. (Wood Science) Doctor of Philosophy (Wood Science): Ph.D. (Wood Science)

CHAPTER 5

RESEARCH INSTITUTES AND UNITS ATTACHED TO THE UNIVERSITIES

UNIVERSITY OF CAPE TOWN

BIOMEMBRANE RESEARCH GROUP

This Group is attached to the Department of Chemical Pathology of the Medical School. It investigates the biological properties of cellular membranes in respect of disease processes. Research is carried out on the nature and mechanisms of calcium movements in skeletal muscle and their relationship to anaesthetic-induced hyperthermia and muscle fatigue.

Secondly, the group is also interested in the mechanism of oxidation of drugs and po= tential carcinogens, in particular the involvement of liver cytochromes in the oxida= tion mechanism.

CARDIOVASCULAR BIOCHEMISTRY LABORATORY

The biochemical function of the heart and major blood vessels is studied in the context of diseases affecting these organs, especially atherosclerosis and disorders in which proteins undergo excessive destruction in various types of muscle cells. A field of special interest is the biochemistry of arterial connective tissue components, in= cluding proteoglycans.

Special facilities: Fully equipped tissue culture unit; micro-methodology for radio= metric and densitometric protein assays; heart perfusion systems.

CENTRAL ACOUSTICS LABORATORY

The Central Acoustics Laboratory was established in 1972 as an interfaculty laboratory to cater for the research requirements in acoustics courses and demonstrations on va= rious aspects of acoustics are arranged for both post-graduate and undergraduate stu= dents.

Research projects include, inter alia, ultrasonically enhanced liquid filtering; bubble size and distribution analysis; underwater sound modelling; architectural acoustics.

Special facilities: Reverberation rooms for the determination of the acoustic properties of materials.

CENTRE FOR AFRICAN STUDIES

The Centre for African Studies is interdisciplinary. Its objects are

- to encourage, stimulate, support and co-ordinate teaching and research, particularly at post-graduate level, in the various fields of study concerned with man in Africa;
- to forge academic links with other African countries by means of information exchange, travel, interchange of staff and students, and the arrangement of visits to this University by specialists in African studies from other countries;
- to develop the University of Cape Town as a resource centre for African research.

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 re= search 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.

CHAMBER OF MINES PRECAMBRIAN RESEARCH UNIT

The Unit was established in 1963 with funds made available by the Transvaal and Orange Free State Chamber of Mines (now South African Chamber of Mines).

Research has been concentrated on problems of Precambrian stratigraphy, sedimentology, petrology, structure, geochemistry and geochronology in the western region of Southern Africa between Cape Town and the Kunene River, with reconnaissance studies extending into Angola and Botswana.

Close integration and collaboration are maintained with the Departments of Geology and Geochemistry in the School of Earth Sciences, where modern facilities for laboratory research are available at all times.

CLEFT PALATE RESEARCH CENTRE

The Centre was established in 1969 with funds made available by the Murray Trust. One of its main objectives is to facilitate the clinical care of children born with cleft lip and/or palate deformities or allied disorders. Clinical research, documentation and investigations into a number of aspects of this deformity are carried out.

The Centre is attached to the Institute of Child Health.

Special facilities: Nasal endoscopy.

ELECTRON MICROSCOPE UNIT

The Unit provides an interfaculty electron-microscope service for teaching and advanced research. Equipment is available for transmission and scanning microscope of most types of material. In addition to the service, members of staff are engaged in their own research projects.

ENERGY RESEARCH INSTITUTE

This Institute has been formed to co-ordinate work on various aspects of energy production and utilisation 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. Energy of importance on a regional basis will be considered. The Institute is currently studying energy utilisation in industry.

FISHING INDUSTRY RESEARCH INSTITUTE

The Institute, established in 1946, serves the fishing industry in South Africa and South-West Africa. The functions of the Institute are to conduct research into the preservation, processing, packing and transport of fish and fish by-products; to ini= tiate 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 technolo= gy throughout the world.

INSTITUTE OF CHILD HEALTH

The Institute was established in 1974 with the main objective of promoting total child care. The Institute combines the educational and research activities of the depart= ments of the University that are involved in the care of the sick child, and is support=

ed by the most up-to-date specialised services. A wide range of research activities is carried out, including clinical and laboratory research; epidemiological surveys; and sociological studies.

The Child Care Information Centre, which is incorporated in the Institute, is a reference centre for information about all the service facilities available for handicapped chile dren.

A Child Safety Centre directs its efforts to the prevention, as well as to the study of the effects, of accidental injury in children.

The building is situated at the Red Cross War Memorial Children's Hospital, Rondebosch, Cape Province.

INSTITUTE OF CRIMINOLOGY

The Chair of Criminology has been established as a result of the generosity of various public bodies, in particular the National Institute for Crime Prevention and Rehabili= tation of Offenders (NICRO).

The principal objects of the Institute are to initiate, co-ordinate and develop teach ing and research in the broad field of criminology both within and outside the Univer sity.

INSTITUTE OF OCEANOGRAPHY

The Institute co-ordinates various aspects of marine research at the University. It is not a formally constituted institute but has a Board of Control which consists of the Director and representatives from the four main groups involved in marine research, viz physical oceanography (Department of Oceanography); marine biology (Departments of Botany and Zoology); marine geology and geophysics (Department of Geology); and oceano= graphic radioactivity (Department of Physics).

Central to the activity of the Institute are the Institute library, workshop and other technical facilities, underwater diving unit, skiboats equipped for work in shallow water and the 30 metre research vessel <u>Thomas B. Davie</u>, which undertakes both deep-sea and coastal scientific cruises.

One of the larger research groups in the Institute is the Marine Geoscience Group.

MARINE GEOSCIENCE GROUP

The Group concentrates on three main areas of activity around southern Africa, all in the fields of sedimentology and stratigraphy; shallow-water studies (bays and estuaries), continental shelf sediments and deep ocean basin sediments. There is also a research project on the structural and magnetic history of an oceanic aseismic ridge in the south-eastern Atlantic, and the Group is collaborating with workers in the UK on con= tinental margin studies in the eastern Atlantic ocean.

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 specialised 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 ornitholo= gical and general zoology. This library is available for use by staff and students of the University.

SA MINING INDUSTRY RESEARCH CENTRE FOR HEART DISEASE AND ORGAN TRANSPLANTATION

During 1968 the University received a gift of R1 000000 from the South African Mining Fi= nance 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.

SCHOOL OF ENVIRONMENTAL STUDIES

The School is an interfaculty facility. It offers programmes of directed study and research over wide-ranging fields at the post-graduate and senior undergraduate level.

Programmes are organised within the context of two general attitudes: environmental management and environmental sciences. The post-graduate programmes require at least one year of full-time attendance at the University.

SOUTH AFRICAN BIRD RINGING UNIT

The South African Bird Ringing Unit (SAFRING), which is financed jointly by the nature conservation bodies of the four provinces and South-West Africa and by the South African Ornithological Society, administers bird ringing activities in Southern Africa.

The primary functions of SAFRING are to process recoveries of ringed birds and to serve as the repository for all bird ringing data collected in Southern Africa. Analyses of these data are undertaken to determine the distribution, migration routes and dispersal patterns and life expectancy of Southern African bird species.

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 fa= culty 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 univer= sities, the Atomic Energy Board, the Council for Scientific and Industrial Research, the Cape Provincial Administration and organised Commerce and Industry in the Cape Pro= vince.

The two universities are undertaking a programme of advanced training and research for students in the fields of nuclear and atomic physics, 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.

WATER RESEARCH ION EXCHANGE UNIT

The Unit was established in 1974 with a grant from the Water Research Commission to un= dertake contract research on the desalination and tertiary treatment of various waste= waters. The purpose of the research is to establish the viability of ion exchange for the production of good quality water for industrial re-use and for potable purposes.

WATER RESOURCES AND PUBLIC HEALTH ENGINEERING LABORATORY

Research is carried out in the following three main fields: wastewater treatment, with particular attention to the kinetics of the activated sludge process in carbon removal, nitrification, denitrification and phosphorus removal under time and space varying conditions; water treatment, coagulation and flocculation systems and air flotation; and chemistry of the carbonate system in low and high salinity waters.

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. Projects in progress are, <u>inter alia</u>, a survey of the chemistry of polysaccharides in relation to taxonomy; NMR spectroscopy of sugar derivatives.

CHROMATIN RESEARCH UNIT

This Unit which is attached to the Department of Biochemistry, investigates the primary structures of chromosomal proteins, their role in the process of differentiation and chromosomal protein-hormone interaction. Protein sequencing methodology using auto= mated sequenators in conjunction with high-pressure liquid chromatography is being de= veloped.

Special facilities: Protein sequenator, high-pressure liquid chromatograph.

GEOCHEMISTRY RESEARCH UNIT

The research work of the Unit, which is attached to the Department of Geochemistry, is carried out in the following fields: Space chemistry: the chemistry of stony meteo= rites and lunar materials; geochemistry of kimberlite and associated inclusions; geo= chemistry of sea water; geochemistry of deep sea sediments and nodules.

In addition, members of the Unit participate from time to time in collaboration with members of the Geochemistry Department in research on the geochemistry of basalts, with particular reference to the distribution of rarer elements in basalts from oceanic areas and the development of suitable analytical techniques for application in the analysis of a wide range of geological materials.

Special facilities: One electron microprobe analyser; two optical spectrographs; three X-ray fluorescent spectrographs; and one atomic absorption spectrophotometer.

RESEARCH UNITS AND GROUPS SUPPORTED BY THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (MRC)

ENDOCRINE/DIABETES RESEARCH GROUP

This Group was established in 1955 to undertake clinical and laboratory research in the fields of diabetes and endocrinology. Early work covered the concept of "pre-diabetes", calcium metabolism, intersexual states and endocrine changes in malnutrition. For several years the Research Group has investigated the epidemiology of diabetes in South Africa and the aetiology of renal stones. Recently attention has been focussed on chronic pancreatitis as a diabetic model and on the "gut" hormones. The Group has also worked with growth hormone and prolactin.

ISCHAEMIC HEART DISEASE RESEARCH UNIT

This Unit was established in 1976 to combat the high incidence of heart attacks (ischaemic heart disease, coronary thrombosis) in South Africa with particular reference to a deeper understanding of the factors which influence death from sudden irregular beating (ventricular fibrillation).

ISOTOPE AND IMMUNOASSAY LABORATORY

The Laboratory is supported by the Medical Research Council, the Atomic Energy Board, the International Atomic Agency and the University Staff Research Fund. The prime in= terest relates to the physiology of neurohormones of the brain and gut. The technical expertise centres around the development of sensitive radio-immunoassays and the use of organ perfusion techniques such as the isolated pituitary perfusion system, isolated nerve synapses, incubated hypothalamus and the isolated perfused rat liver. Binding of neuropeptides to isolated cell membranes is also under study.

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 RESEARCH GROUP

This Group was established in 1957 to study the human porphyric disorders which include no fewer than 14 different entities. The three most common porphyrias in South Africa are Erythrohepatic Protoporphyria (EHP), Variegata Porphyria (VP) and Symptomatic Porphy= ria (SP).

VIRUS RESEARCH UNIT

The research programme of the Unit continues to focus attention on basic biophysical and immunological properties of virus particles and related macromolecules such as anti= body globulins and other serum components. Viruses responsible for serum hepatitis, influenza and the fatal complications of measles infection in man, and those associated with agricultural insect pests such as the lucerne worm, the bollworm and the larvae of the pine emperor moth have received special attention. The mechanisms by which viral replication may be inhibited or at least influenced to the advantage of the host have been investigated in several systems.

UNIVERSITY OF DURBAN-WESTVILLE

CANCER RESEARCH INSTITUTE

The Institute which was established in 1972 is engaged in advanced oro-gastric research utilising animal and human materials.

CHILD GUIDANCE AND RESEARCH CENTRE

The Durban-Westville University Child Guidance and Research Centre has the following aims and objectives:

- To promote social and educational-psychological services in respect of the Indian community in Natal;
- to undertake psycho-social treatment and rehabilitation of children with behaviour and/or scholastic problems;
- to prevent social maladjustment; and
- to undertake research in respect of behaviour and/or scholastic problems.

COMMUNICATIONS MEDIA CENTRE

The Centre was established in 1974 with the accent on educational television. The Centre has a black and white facility and a sophisticated colour studio, the latter housing "semi professional" one inch VTRs, TBC and chromakey facilities.

DOCUMENTATION CENTRE FOR INDIAN CULTURE

The Centre which was established in 1979 functions as an archive and a living memorial on all aspects relating to the Indian community in South Africa. It aims to record the present, preserve the past, provide information, stimulate research and to establish a museum.

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
- Housing needs and attitudes in the Indian community in Greater Durban and Pieter= maritzburg
- Socio-economic studies of squatter and planned residential areas
- The Natal Section of a National Survey and the recreation needs of South Africa's population
- Recreation attitudes of recreators in Natal Parks Board reserves
- Housing, recreation and land use in Umzinto.

UNIVERSITY OF FORT HARE

AGRICULTURAL DEVELOPMENT RESEARCH INSTITUTE (ADRI)

The Institute was established in 1976 and began operations in 1977. It is designed to serve all Black developing areas in South Africa, Transkei and Bophuthatswana.

The objects of the Institute include research into the wide range of socio-economic and technical problems that exist; to undertake research into and plan agricultural develop= ment in Black rural areas; to arrange facilities for the provision of agricultural ser= vices; to promote agricultural specialist extension in Black rural areas; to supervise the involvement of post-graduate students in ADRI's projects; to provide opportunities for vacation work.

ADRI also aims to promote mutual liaison between the University's Faculty of Agricul= ture and agricultural practice.

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, while the University undertook to pay the salary of the Director and to provide office accomodation for all the staff. The University has also assumed responsibility for the salaries of the Senior Assistant Editor and the Assistant Director. The Transkei Go= vernment and the Ciskeian Government make considerable annual grants available.

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 Uni= versity of Fort Hare, so that when the dictionary has been completed the organization will continue as a permanent Institute for the study of Xhosa.

UNIVERSITY OF NATAL

AERIAL SURVEY AND PHOTOGRAMMETRIC RESEARCH GROUP

The Group is attached to the Department of Land Surveying of the University of Natal in Durban. Its objective is to undertake or assist in projects which are either survey oriented or in which survey forms a basis for data collection or presentation. Projects include aerial survey camera environment studies; the use of various photographic emul= sion types for ecological surveys; and a long-term aerial triangulation experiment. Special facilities: Fully equipped photographic aerial survey aircraft; camera cali= bration goniometer; instrumentation for analytical photogrammetry; and orthophoto equipment with cartographic back up.

CENTRE FOR APPLIED SOCIAL SCIENCES

Up to the end of 1975, the Centre was known as the Institute for Social Research which was established at the University in 1954, with the aim of undertaking and encouraging both basic and sponsored research in the fields of Development Studies, Industrial So= ciology, Labour Studies, the Sociology of Planning and Race Relations. A further major aim is to provide training in Applied Social Sciences and Research Methods.

The Centre has undertaken important studies throughout Southern Africa, and has organised seven nation-wide conferences.

The Centre is now formally a member department in the Faculty of Social Science and offers a one-year post-graduate Diploma course in Applied Social Sciences.

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 opera= tions. The Group concentrates its activities on the extraction of minerals by flotation.

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 Asso= ciation 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 SA National Committee for Oceanographic Research. It carries out biological research in the south-western region of the Indian Ocean.

POLLUTION RESEARCH GROUP

<u>AECI Section</u> : This Section is sponsored by AECI Ltd and its activities cover both air and water pollution control. The objectives are to enable post-graduate students to study aspects of pollution and pollution control, and to assist industry in under= taking studies in the control of pollution at its source and in the recovery and reuse of water and chemicals.

Water Research Commission Section: This Section under contract to the Water Research Commission is making an in-depth study of water management and effluent treatment in the textile industry.

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 established in 1946 as a joint undertaking of the South African Wattle Growers' Union, the University of Natal and the Government Department of Forestry. Its research on wattle was extended to eucalypts in 1969. The Institute is near the Faculty of Agriculture and it operates a field experiment station on a 270ha farm near Pieter= maritzburg.

RESEARCH GROUP AND INSTITUTE OF THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (MRC)

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.

RESEARCH INSTITUTE FOR DISEASES IN A TROPICAL ENVIRONMENT

The Institute carries on research into amoebiasis and other parasitic diseases of man and animals. It began as the Amoebiasis Research Unit, set up in 1948 by the CSIR, and has been helped in expansion by the Public Health Service of the United States of America, and other donors. It was established as an institute of the MRC by joint agreement with the University in 1976.

UNIVERSITY OF THE NORTH

ADVISORY BUREAU FOR BLACK BUSINESSMEN

The Bureau was established in 1978 with the following objectives:

- To improve the efficiency of the independent Black businessman in Southern Africa;
- to encourage the establishment of new undertakings;
- to fulfil the training needs of the Black businessman; and
- to generate income by means of remuneration and grants.

The Bureau will undertake any research that may enable it to offer a better service to its members.

GUIDANCE BUREAU

The functions of the Guidance Bureau are the following:

- Provides assistance with personal and academic problems in collaboration with the Department of Psychology and the Language Laboratory of the Faculty of Education.
- Assists new students with course and subject choice as well as general orientation to the university.
- Helps senior students in choosing and finding suitable employment.
- Provides a facility for the practical training of counselling psychology students.
- Conducts various research projects related to the career development of Black stue dents.

UNIVERSITY OF THE ORANGE FREE STATE

BOYDEN OBSERVATORY

In July 1976 Boyden Observatory was incorporated into the Department of Astronomy of the University of the Orange Free State. Research comprises photoelectric photometry; spec= troscopy; solar physics; aeronomy.

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.

Nature of research: Phase I and II drug studies are undertaken on healthy volunteers and patients, making use of clinical and laboratory methods to establish safety efficacy and pharmacokinetic characteristics.

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:

- 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 re= search in ground-water problems. The development and evaluation of techniques for de= termining 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 inves= tigated 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 initia= tive
- 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 socio= logists as either member 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 in= vestigations of an historical-cultural, anthropological, demographic, economic, socio= logical and political nature to determine the requirements of the planning of educa= tional 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 re= search projects will be at their disposal to use at will.

RESEARCH UNIT AND INSTITUTE SUPPORTED BY THE CSIR

FLAVANOID RESEARCH UNIT

This Unit which is attached to the Department of Chemistry of the University, is conducting five main research projects at present. They are inter alia, as follows:

- Polyflavanoid (tannin) and flavanoid synthesis, including synthesis of bi-, tri- and tetra-flavanoids, and oxidative coupling reactions
- Novel rotenoids, including their isolation, characterisation and transformations; study of their toxic properties
- Chemotaxonomy of South African and Australian species of Acacia and Anacardiaceae.

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, the Atomic Energy Board and the Geological Survey. Re= search is conducted by five research groups in the Institute, viz Limnology, Palynology, Sub-Antarctic Islands (Marion and Prince Edward), Terrestrial Ecology and Plant Bio= chemistry.

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

BIOCHEMICAL FITNESS STUDY UNIT

This Unit is attached to the Department of Biochemistry of the University. Research comprises, inter alia, investigations into the effect of physical exertion and Vitamin C on biochemical blood parameters of a group of strictly controlled subjects; the inter= action between ACTH related factors, fitness and ageing of laboratory animals; bioche= mical, physiological and psychological parameters in the rehabilitation of cardiac pa= tients on a controlled exercise programme; influence of exercise, fitness and ageing on fat metabolism and overweight.

INSTITUTE FOR THE DIDACTICS OF MATHEMATICS

The Institute seeks to promote the didactics of mathematics at all levels by means of research into the teaching and learning of mathematical subjects from primary to ter= tiary levels; the documentation and classification of relevant information; the deve= lopment and building up of good relations in the teaching profession.

The Institute's specific tasks include the critical analysis of mathematics teaching at schools; the development of instructional material and aids; the evaluation of existing syllabuses and textbooks; diagnosis of problems and remedial work; opinion polls; the presentation of specialised courses; liaison with other interested parties; training of specialists to present refresher courses; research in related fields.

INSTITUTE OF CHURCH ARCHITECTURE AND CHURCH ART

The objectives of the Institute include the collection of data and the compilation of a register of church buildings in South Africa; research; dialogue with interested par= ties; stimulation of interest and meaningful innovation; development of a policy for the preservation of buildings and works of art in this field; guidance and assistance for post-graduate work.

The Institute seeks to achieve its objectives by building up a library of photographs and appropriate data on church buildings and art; arranging symposia and discussions; publishing; co-ordinating and stimulating research projects.

INSTITUTE FOR PLANNING RESEARCH

The Institute is an independent (though an integral part of the University) non-profit organisation 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 organising 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 Plan= ning in determining the nature and priority of the research programme; to liaise with other regional research organisations, e.g. Regional Development Committees and Region= al Research Institutes at other universities.

RESEARCH GROUP AND UNIT SUPPORTED BY THE CSIR

ENVIRONMENTAL CHEMISTRY RESEARCH GROUP

The Research Group, in collaboration with the CSIR and the Department of Planning and the Environment, undertakes a study of the chemical components of the marine environ= ment in conjunction with the Zoology Subject Committee at the University. Special at= tention is given to pollutants such as heavy metals, pesticides and oil.

URANIUM CHEMISTRY RESEARCH UNIT

This Unit is attached to the Department of Chemistry of the University.

Research comprises a study of the structural, thermodynamic and theoretical aspects of thorium and especially uranium metal-ligand interaction.

POTCHEFSTROOM UNIVERSITY FOR CHRISTIAN HIGHER EDUCATION

CENTRE FOR INTERNATIONAL POLITICS

The Centre, established in 1966, is the research arm of the Department of International Politics. The Department is responsible for teaching.

The following are the main functions and activities of the Centre:

- Research focused on matters and problems which are primarily of interest to South Africa
- To be a centre of documentation and information concerning international affairs
- The dissemination of information or data in connection with world politics
- To act as a forum for the discussion of world affairs. This is being done by means of
 - . more or less five seminar meetings per annum;
 - . an annual conference which enjoys country-wide interest and support;
 - . regional conferences in different parts of the country.

The Centre's publications include

- A monthly journal, <u>Die Wêreld in Oënskou</u> (The World in Review) for topical interna= tional affairs
- A series called <u>Publications of the Centre for International Politics</u> (More or less 2 publications per annum)
- The Perspective Series, comprising smaller monographs.

INSTITUTE FOR ADMINISTRATIVE AUTOMATION

The Institute, established in 1963, undertakes expansion of and research on administrative automation.

INSTITUTE FOR THE ADVANCEMENT OF CALVINISM

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This Institute was founded in 1966 to conduct research on every aspect of Calvinism in particular and the reformed heritage in general - especially as applied in all different spheres of life in South Africa.

The Institute publishes the following series: a Study pamphlet series (monthly), a se= ries of brochures (four or more issues per annum), a series of Calvin causeries, various collections (volumes containing articles by different specialists on a certain issue), and a series called "The impact of Calvinism in South Africa". The Institute also runs (since 1975) the international clearing house of the International Conferences for Christian Higher Education and publishes in this connection a quarterly <u>Circular</u> (in English).

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 Ad= ministration.

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 as well as a B.A. Honours course in African Studies leading to M.A. and D.Phil degrees in African Studies; undertakes research and organises study tours to Af= rican territories.

The Institute publishes a popular bulletin, ten numbers appear annually, on African affairs, <u>Nuus oor Afrika</u> (News of Africa). Seminars as well as the findings on other research projects are also published. A recent publication of the Institute is <u>Afrika in Neutedop</u> (Africa in a nutshell).

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, <u>inter alia</u>, 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 INDUSTRIAL PHARMACY

The activities of the Institute comprise the formulation and development of pharmaceu= tical 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 bio-availability trials.

INSTITUTE FOR LINGUISTIC AND LITERARY RESEARCH

This Institute, which is attached to the Department of Afrikaans-Nederlands, does re= search on, inter alia, subjects such as lexical theory, sociolinguistics, language ac= quirement 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 Provin= cial Administration of Transvaal was also completed. Further work includes soil survey for the development of homelands, town planning and for individual farms.

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 2.5 MV Van de Graaff accelerator of the Potchefstroom University and a 3MV Van de Graaff accel= erator of the Atomic Energy Board.

Research in the field of cosmic rays is concentrated on the geophysical aspects of cos= mic rays. (See Cosmic Ray Research Unit p.169.)

INSTITUTE FOR PHYSIOLOGICAL RESEARCH

The Institute was established in 1965. The research programme concentrates on studying those factors which influence the contractility of the heart muscle. Non-invasive techniques for the diagnosis of heart disease in man and animal are being developed.

INSTITUTE FOR PSYCHOLOGICAL AND EDUCATIONAL SERVICES AND RESEARCH

The Institute was established during 1966 with the object of providing certain psycho= logical 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; se= lection 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
- Training of students in clinical and counselling psychology
- Counselling and psychotherapeutic services to the general public
- 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 problems in the Western Transvaal and in the Republic of Bophuthatswana.

INSTITUTE FOR RESEARCH IN CHILDREN'S LITERATURE

The Institute, which was established in 1979, is attached to the Department of Library Science of the University and its Director is the Professor of Library Science. This Institute is the only one of its kind in South Africa. Its main objective is to pro= mote children's literature especially in South Africa by undertaking research projects on its own; by initiating research in this field by other institutions such as univer= sities, and by promoting post-graduate study in the field of children's literature.

The Institute serves the teaching and library professions and the publishers in South

Africa by organising symposia, seminars and courses. The Institute has a large collection of South African books for children and the youth; these books are used exclusively for study and research purposes.

In its <u>Bulletin</u> which is published twice a year, the Institute announces its activities as well as the results of research projects completed.

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, <u>South Africa's population problem</u>: <u>Is there a solution?</u>, <u>The Coloured challenge</u> and <u>South African Sport Policy 1910-1975</u>.

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.
- <u>Limnological research unit</u>, which investigates the composition of fauna in South Af= rican rivers and dams. Surveys to determine water pollution or the productivity of water are also undertaken.
- Snail research unit (See p. 170.)

RESEARCH UNIT FOR CHEMICAL KINETICS

The aim of the kinetic studies undertaken is the elucidation of the mechanisms of pho= tolytic, thermolytic, anation and equation reactions encountered in a diversity of com= plex ions of metals.

The Unit has been involved also in research carried out at industrial establishments. Such research projects have been the pre-ignition combustion kinetics of fuels, the crystallisation kinetics of waxes, and at present is involved in thermal precipitation kinetics of metals sulphates and reverse osmotic kinetic studies of mine effluents, etc.

SMALL BUSINESS ADVISORY BUREAU (SBAB)

The SBAB is a service organization for small businesses in South Africa. It is support= ed jointly by the Government, organised commerce and Potchefstroom University for CHE.

The general objectives of the SBAB are

- to promote the efficiency of the small businessman in the Republic of South Africa;
- to assist in developing and stimulating a sound efficient and balanced small business sector with the aim of maintaining it as one of the cornerstones of a free market economy and to assist in its growth;
- to promote a sound and competitive commercial and social structure through services and/or the involvement of private firms; government organizations, educational in= stitutions and other bodies.

To achieve its objectives, the SBAB offers a variety of services to small businesses such as consultations, lay-out and technical planning, training, entrepreneurshipdevelopment and financing and the supply and interpretation of information.

Consultants of the SBAB that operate from the head office on the campus of PU for CHE as well as from regional offices at Bellville and Durban 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.

The training programmes and services of the SBAB are aimed at the elucidation and application of management principles which are to the point, and of trade aspects concerning the small business in all its facets. Special attention is given to the practical side and as far as possible, concepts and principles are illustrated with the aid of case studies. The training programme is aimed at the owner/employer as much as at the em= ployee of the small business.

Training programmes are initiated by the SBAB itself but are frequently provided on re= quest of organizations, institutions and individual businesses.

Courses and seminars are provided at various centres throughout the country. The duration, contents and method of presentation of these vary according to the demand, the time available and the circumstances of the small businessmen attending the course.

The SBAB is building up a central information bureau for South African small business= men. Data is collected from all sources, local and overseas, and processed. Thus a specialised data bank and library has already been constructed.

Individual inquiries and personal calls receive special attention. Financial and trade results of small businesses are analysed, compared and assessed on request.

SOUTH AFRICA INSTITUTE FOR CO-OPERATIVES

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 and to undertake research.

A research project completed recently is Co-operative Management in South Africa.

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, the Jonathan Zenneck Research Station at Tsumeb in South-West Africa and at Sanae in the Antarctic as well as by a mobile neutron monitor on the Antarctic research ship, the SA Agulhas. 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. Cosmic ray longitude and la= titude distributions are studied for correct cutoff rigidity distributions, in order to evaluate the reliability of the simulated large-scale geomagnetic field and its secular variation.

The Unit issues monthly publications of hourly data of neutron monitors at Potchefstroom, Tsumeb and Sanae, while the Hermanus neutron monitor data bulletin is produced by the Magnetic Observatory in collaboration with the Unit.

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, cardiovascular drugs, anti-parkinsonian drugs, appetite suppressants and anti-depressant drugs.

SNAIL RESEARCH UNIT

This Unit was established in 1957 for the purpose of determining means by which the snail intermediate hosts of bilharzia and other freshwater snails may be recognised, what their present distribution in the Republic of South Africa is and which factors govern their survival.

The Unit is working on the identity, distribution and conditions for survival of fresh= water snails, in order to provide scientific advice 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 POLICY AND ANALYSIS

The Bureau was established on 1 January 1973 as the research arm of the Department of Economics of the University of Pretoria. Research is directed at the field of Economics in general and the role of the government in the economy in particular. Other functions include publication of research results and meaningful viewpoints held by the members of the Department of Economics and rendering advice to organisations on specific matters. The Bureau also provides research services in the Department, such as the compilation and classification of sources of information.

The publications and research of the Bureau can be grouped under the following headings:

BEPA economic papers: Contain research results and economic viewpoints of the Bureau's associates.

Focus on key economic issues: A regular graphical expose of topical economic issues compiled by BEPA for Mercabank and published by the Bank itself.

<u>Special focus series</u>: Most extensive treatment of material assembled over a period of time on key economic issues which prove to be of general interest and which cannot be covered fully within the limits of the series mentioned above.

<u>Contract reports</u>: Contain the results of research undertaken by BEPA on a contract ba= sis. (These reports are normally not available for general distribution.)

BEPA-mededelings (Communications - only available in Afrikaans): A folder of four pages

(A4) containing reading material for undergraduates digested from work done by teaching staff and master's and doctoral students in the Department of Economics.

Other publications: The Bureau also publishes work of a text-book nature within its own field of interest.

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 in= dustry 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 tech= niques and in particular with regard to the use of financial and statistical infor= mation;
- 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 manage= ment in the short term, especially of the small firm in South Africa, with particular reference to effective utilization of available financial and statistical informa= tion;
- 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:

- <u>A research function</u> is performed in that research is being done with regard to interfirm comparison in general and its application in specific branches of trade, indus= try and the professions.
- <u>A service function</u> 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.
- <u>An educational function</u> is performed by the encouragement of the use of these sta= tistics 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 1930.

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 400 chil= dren are examined per annum.

- The training of educational and guidance psychologists, orthopedagogues 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 col= lect 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 informa= tion 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 Che= mistry. 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 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 $R400 \times 10^9$. 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 specialised 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 cir= cuits 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 in= terest 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, e.g. an electron beam pattern generator EPG-102, and an Auger spectroscope. The research personnel consist of teaching staff and some, about eight at present, who are fully engaged on research. Research results are being published in appropriate journals and reports, and presented at national and in= ternational 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.

Summer Schools are held regularly to introduce to industry the versatility and applica= bility of hybrid processes as economical microtechnology. The Institute is funded by the University of Pretoria, the CSIR and private industry.

INSTITUTE FOR MISSIOLOGICAL RESEARCH

This Institute was founded in the beginning of 1979 in view of the changed conditions under which Christian mission work in Africa and elsewhere has to be carried out. Its primary aim is to assist the Church with regard to its missionary obligation by doing the necessary research work regarding the status of the Christian faith and the most effective methods to be used by the mission in the present-day world. Apart from his= torical research (History of Missions) it pays attention to the unfinished mission task, Marxism and mission and the Church and Communication. It is also building up a docu= mentation centre of relevant literature and of research being done. A news bulletin on research work in progress is published twice a year and ad hoc meetings (conferences, symposia, etc.) will be organised. The Institute is sponsored jointly by the University of Pretoria and the Dutch Reformed Church (Ned. Geref. Kerk).

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 priori= ties; 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 adaptability of collagen under conditions of tension a problem which is of great interest from an orthodontic point of view
- The pathogenesis of cysts
 - . The interdependence of epithelium and connective tissue in experimental cyst de= velopment
 - . The role of immunological factors in cysts
- Bone biology
 - . The isolation of bone induction factors
 - . Bone preservation for implantation
 - . Bone cements used in orthopaedic surgery The bone cement interphase

- Tendo-genesis

The healing of tendons with special emphasis on the maintenance of an effective blood supply in tendon surgery of the hand.

INSTITUTE FOR STRATEGIC STUDIES

The Institute is primarily a centre for research and documentation. The Institute in= tends to establish an authoritative reference and documentation centre on general and international strategic questions, conflict strategies, co-operative and negotiating strategies etc.; to organise regular and <u>ad hoc</u> meetings (conferences, symposia etc); arrange for appropriate <u>ad hoc</u> 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 con= flict situations and thus includes non-conflict strategies such as peace strategy, al= liance strategy, diplomatic strategy and so forth.

INSTITUTE FOR THE STUDY OF PLURAL SOCIETIES

The main task of the Institute, which is a specialised study centre within the Depart= ment 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 histori= city, nationality, ethnicity, manner of living, language, faith, race, caste, class, status, estate and power. Apart from the local situation attention will 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 va= riety of 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, SA 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 post-graduate training it offers in Zoology and there are many post-graduate students currently enrolled from many coun= tries. In addition, several post-doctoral fellows are accommodated on specialist pro= jects.

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MARGARETHA MES INSTITUTE FOR SEED RESEARCH

The Institute's aims and functions cover the investigations of all aspects of seed such as seed formation, development, structure, life processes, storage and germination and also the training of students in this field.

SOUTH AFRICAN INSTITUTE FOR AGRICULTURAL EXTENSION

The South African Institute for Agricultural Extension was established at the Universi= ty of Pretoria at the beginning of 1979. The task of the Institute is to render ser= vice in the form of extension research and training to organizations concerned with agri= cultural extension and development in their pursuit of more efficient extension.

The main objectives of the Institute are

- to acquire fundamental and applied knowledge in agricultural extension through re= search and through the study and application of research results from related disci= plines;
- to investigate problems experienced in the practical field of agricultural extension and development;
- to stimulate and initiate extension research through scientific evaluation of programmed extension in the field and to offer advice in this respect;
- to co-ordinate extension research;
- to provide training courses in agricultural extension; and
- to provide a consultation service concerning any practical aspects of agricultural extension.

SPORT RESEARCH AND TRAINING INSTITUTE

A Sport Institute, the first of its kind in South Africa was constituted on 1 January 1979, with a view to promoting scientific sport research and training. It functions within the Department of Physical Education of the University of Pretoria and is inti= mately connected with the University's Bureau of Sports which is responsible for the promotion of student sport and recreation.

Aims

- Research in sport, recreation and matters relating to Physical Education
- Publication of research results
- Training and re-orientation of sport officials, trainers, participants and recreation officials
- Training of students in Sport Science
- Service to the Department of Sport and Recreation, provincial authorities, national, provincial and local governing sport bodies with regard to particular sport and re= creation projects
- Advisory services to sport participants relating to sport aptitude and improving achievement.

Functional Aspects

Research

Sport directed research comprises a wide range of studies.

Many opportunities exist to foster national sport along these lines of research.

The Institute undertakes scientific research for sports leaders who feel the need for research in their particular fields. It is envisaged that technical directors or train= ers in various sports will serve as representatives on research planning committees com= prising of the Institute, The South African Sports Federation as well as The Department of Sport and Recreation.

Sport Training

Systematic and standardised training in the different facets of sport is directed to= wards the provision of an adequate background in terms of relevant know-how for all those voluntary and full-time sport leaders of all racial groups in order to promote sport op= timally in all its differing facets. Sport leadership encompasses training in Coaching; Sports officiation; Sports administration and organisation; Sports promotion and public relations activity; Technical aspects (e.g. facilities, constructions, groundsmanship).

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
- biochemical and functional aspects of the pineal gland
- circadian rhythm of melantonin in baboons.

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 investiga= tion 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 with= in the scope of this research.

RAND AFRIKAANS UNIVERSITY

APPLIED MINERALOGY RESEARCH UNIT

This Unit, which is supported financially by the National Institute for Metallurgy, un= dertakes research on mineralogical problems which are of importance to the metallurgical industry. It is attached to the Department of Geology of the University.

BUREAU FOR HIGHER EDUCATION

The Bureau, which was established within the University in February 1968, has the following functions:

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- The gathering of information, documentation and the advancement and maintenance of contact with similar organisations;
- the planning and execution (with the assistance of departments where necessary) of surveys, investigations and experiments in connection with aspects of higher educa= tion;

- the submission of relevant data, research results and recommendations for consideration, inter alia, at symposia organised by the Committee for University Teaching;
- arranging conferences and courses for lectures in connection with university education.

CENTRE FOR EDUCATIONAL MEDIA

The Centre, which was established within the University in January 1976, has the follow= ing functions:

- Promoting the integration of media in university teaching via advice to lecturers. the production of software, and a central distribution point of apparatus;
- organising decentralised self-study facilities at the university;
- planning and conducting research (when necessary in collaboration with the Bureau for Higher Education and with the assistance of departments) relating to educational media
- collecting and disseminating information, and establishing contact with similar in= stitutions;
- technical services connected with educational media such as the installation, main= tenance and testing of apparatus.

CENTRE FOR ISLAMIC STUDIES

The Centre was founded in 1977 as a research group concentrating on Arabic and Islamic themes concerning the Middle East, Africa and South Africa.

CHAIR OF NATIONAL STRATEGY

This Chair was created in 1978 for post-graduate research into, and study of national strategy, on an interdisciplinary basis.

INSTITUTE FOR AMERICAN STUDIES

The Institute was established in July 1979. The aim of the Institute is to develop an understanding of the American way of thinking and decision-making by means of research, seminars, and regular interchange of visitors. A multi- and interdisciplinary approach is emphasised.

INSTITUTE FOR CHILD AND ADULT GUIDANCE

The Institute was established in June 1970. The aims of the Institute are:

- To establish facilities for training and research and to initiate research primarily at multi- as well as at interdisciplinary levels;
- to render multi- and interdisciplinary services to the community; and
- the disciplines involved are, inter alia, education, psychology and social work.

INSTITUTE FOR DEVELOPMENT STUDIES

The Institute was founded in 1970 in order to ao full-time research, on an inter-dis= ciplinary basis, into the development problems of underdeveloped areas, including the Black states in Southern Africa.

INSTITUTE FOR ENERGY STUDIES

The approach of the Institute is multidisciplinary, the main purpose being to undertake research into economic and policy aspects of energy supply and demand, and to provide

the forum for discussion of a national energy policy. A major research area of the In= stitute is the optimum utilisation of various energy carriers in order to ensure effi= cient energy distribution.

A framework for the introduction of a post-graduate course in Energy Studies has recently been approved to provide essential training for energy analysis, energy management and energy policy formulation.

INSTITUTE FOR URBAN STUDIES

The Institute was established in 1972. The aims of the Institute are:

- To conduct and promote research related to urban phenomena and problems;
- to promote communication and understanding with regard to such areas between relevant organizations and individuals;
- to provide knowledge and training at post-graduate level about the functioning of the city and its related problems.

LANGUAGE SERVICE

The Language Service was established in October 1970. Its functions are to organise language laboratory services, to make available self-study facilities for language learn= ing, to offer remedial courses in the official languages, to undertake research in lan= guage learning, to offer crash courses in modern languages, to organise conferences, and to co-operate with other universities and organisations concerned with language learning.

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 UNIT FOR SOUTH AFRICAN POLITICS

The Institute was established in 1978 for the following purposes:

- To collect material concerned with contemporary South African politics in general, and Black politics in South Africa in particular;
- to involve itself in on-going research into such political and related areas.

RESEARCH UNIT FOR TRANSPORT ECONOMICS AND PHYSICAL DISTRIBUTION STUDIES

Research is conducted into the mobility of people, movement of goods, availability of infrastructure, etc. within the framework of the parameters set by the economics of society. For research purposes, special emphasis is placed on the co-ordination of the various sub-functions within the total distribution concept.

UNIT FOR THE TEACHING OF AFRIKAANS

The Unit was established in January 1979. Its function is to undertake research aimed at more efficient teaching of Afrikaans as a second or foreign language, and to produce courses and support materials.

RESEARCH UNITS SUPPORTED BY THE CSIR

MAGNETISM AND SEMI-CONDUCTOR PHYSICS RESEARCH UNIT

This Unit in the Department of Experimental and Theoretical Physics is involved, <u>inter</u> <u>alia</u>, in 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 rela= tion to their magnetic properties
- Study of electronic and magnetic properties of South African minerals.

RESEARCH UNIT ON SOLID STATE ELECTRONICS

This research unit of the Department of Electrical Engineering undertakes the following research: Characteristics of thin films (tantalum); instrument and process control of the rf-cathode sputtering process; hybrid micro-circuits (tantalum); ion implantation in monolithics; signal processing in implanted monolithics.

RHODES UNIVERSITY

ANTARCTIC SPACE RESEARCH GROUP

The Antarctic Space Research Group in its present form was established in 1973, al= though 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 one physicist annually to run the programmes of ionosphere and airglow research as a member of the South African Na= tional Antarctic Expedition (SANAE).

Originally the research was primarily ionospheric, but has now expanded to include air= glow studies and is concerned mainly with the region of the South African Magnetic Anom= aly and the effects of particle precipitation on the Upper Atmosphere.

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 organise 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

Development of materials and methods for teaching English in Black primary schools.

INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH

The Institute was established at the end of 1954, to promote, plan and co-ordinate re= search and to pool the human and material resources of a number of social science de= partments. A further aim was to attract and train research workers of all racial groups by giving a greater degree of continuity of employment to retain skills. The Institute contributes to the academic life of the University by attracting eminent scholars to the campus, by organising conferences, symposia and workshops and by sponsoring public lectures.

The first large-scale investigation was the Border Regional Survey, begun in 1955. The Institute has also completed a fifth and final volume of a socio-economic study of twen= ty-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.

Among the major projects in which the Institute is at present engaged are a socio-econo= mic and political study of East London and the Ciskei and a study of the history of the Xhosa-speaking peoples before 1900.

In 1978 the International Library of African Music was affiliated to the Institute. It houses a particularly valuable collection of musical instruments and recordings.

The Institute annually offers a University Fellowship to the value of R8 100 for re= search in all social science fields. The Fellowship is intended to bring mature scho= lars 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 Depart= ment 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 in= dependent corporate body, governed by its own Board of Control. It is recognised by the University as an Associated Research Institute and its Director is a Research Pro= fessor of the University.

The Institute operates in six sections, viz, Footwear Research; Hides, Skins and Protein; Leather Research; Personnel and Statistical; Wattle Tannins; and Environmental Research.

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MICROBIAL GENETICS AND INDUSTRIAL MICROBIOLOGY RESEARCH UNIT

The Unit was established in the Microbiology Department in 1976, with the aid of a grant from the Institute Pasteur, Paris, to provide a centre for applied and industrial microbial research. Studies on the genetics and biochemistry of industrially significant micro-organisms involve the most important and fundamental aspects of applied and industrial microbiology. This is emphasised by the recent developments in microbial genetics techniques, enabling the experimental manipulation of the genetic composition of micro-organisms.

RESEARCH INSTITUTES AND UNIT SUPPORTED BY THE CSIR

J.L.B. SMITH INSTITUTE OF ICHTHYOLOGY

The Institute was established at the end of 1968 to honour the founder of the Depart= ment of Ichthyology and to continue his research on fishes. The Department was essen= tially 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 Honours, M.Sc. and Ph.D. degrees is offered. A Bachelor's degree in Zoology is normally required for prospective candidates. It is planned to expand the Institute to include the teaching of Fisheries Science.

While systematic ichthyology is an important field of interest to the Institute, the staff and students are also engaged in research on the ecology and behaviour of fishes. The freshwater section is concerned with the biology of certain species, aquaculture and fisheries management of dams. The marine section is involved in the revision of Sea Fishes of Southern Africa, which includes investigation of the sublittoral region by divers.

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 developed a fully equipped field research station at Swartvlei, an inportant southern coastal lake near Knysna, and a new programme on the P.K. le Roux Dam on the Orange River, which is also developing. In both instances the Institute is as= sisted by the Cape Provincial Administration's Department of Nature and Environmental 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 publishes a journal Research for Marketing bi-annually.

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 in= struction in tertiary education and specifically in the distance teaching methods of the University.

The functions of the Bureau are to promote research and provide information on university matters in general, university didactics and distance tuition in particular and students' problems. The Bureau offers an advisory service to students.

CENTRE FOR LIBRARY AND INFORMATION SERVICES

At the beginning of 1978 the Centre for Library and Information Services was established as part of the Department of Library Science at the University of South Africa. Its aims are to give specific attention to peculiarly South African problems in the area of library and information services and to ensure continuous research to deal with such problems. To achieve these aims the Centre does basic research on Library and Infor= mation Science, undertakes applied research contracts in the field of practical libra= rianship and information work, encourages members of the teaching staff to do research by providing the necessary administrative and technical support, and publicises the re= sults of research done by the Centre, e.g. through the Department's journal <u>Mousaion</u> and symposia.

Current projects include the compilation of an index of South African library literature, the compilation of a directory of training units and full-time lecturers and researchers in Library and Information Science in South Africa, a study of the influence of televi= sion on the use of public libraries in South Africa, a study of specifications for a statistical data base for the strategic planning of library and information services in South Africa at a national level, and a study of the role of literature and of public libraries in the socio-cultural life of urban Blacks.

CENTRE FOR MANAGEMENT STUDIES

The Centre for Management Studies was established in 1977, mainly to co-ordinate the research of the teaching staff of the School of Business Leadership of the University of South Africa.

The Centre publishes working papers, technical overviews and occasional papers, as well as books containing papers read at different seminars offered by the School of Business Leadership. The Centre also undertakes contract research.

CENTRE FOR OPERATIONS RESEARCH AND STATISTICS

The Centre 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. Operations Research and Statistics supply the methodology for analysing such problems.

As a result the demand for qualified Operations Researchers and Statisticians has more and more outstripped the supply. Because of the advanced mathematical training re= quired, such persons are scarce. Consequently lecturers in Operations Research and Sta= tistics were often approached with decision-making problems. In the past assistance could only be rendered on a limited scale but the founding of the Centre made 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 takes the form of contract research, directed literature surveys and research on the application of Operations Research and Statistics in certain areas.

The Centre does not have a large staff and relies on the use of lecturers of the Uni= versity. 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 encouraged.

INSTITUTE FOR BEHAVIOURAL SCIENCES

This Institute, 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 role of the nervous system in the determination of behaviour is done on a continuing basis. For this purpose a neuro-psychological laboratory has been equipped according to the most modern standards.

Relevant sponsored research is also carried out.

Research results are published in reports of the Institute and by means of articles in local and overseas scientific journals.

Facilities are provided by the Institute for the research interests of members of staff from the various departments concerned. Where possible it also provides facilities for such staff to demonstrate to students practical laboratory techniques applicable to be= havioural research. The Institute has a Counselling Centre in which psychological coun= selling (marital, vocational and development) is provided to staff, students and the public. Interns in counselling psychology are trained in the Centre.

Finally, the Institute provides certain specialised laboratory services whereby profes= sional practitioners can refer selected clients or patients to the Institute for assess= ment or examination.

INSTITUTE FOR CRIMINOLOGY

The Institute for Criminology was established in September 1975 by the Senate and Council of the University of South Africa to plan, promote and co-ordinate criminological research and to establish a working relationship with relevant Government departments and other instances.

Criminological research refers to all scholarly, scientific and professional knowledge concerning the description, explanation, prediction and control of crime and includes the measurement and detection of crime; the treatment of criminals, delinquents and victims of crime; legislation and law enforcement; judicial and correctional systems; development of effective crime prevention techniques; and security management and plan= ning.

Briefly summarised the Institute's activities include (a) basic criminological research; (b) dissemination of criminological knowledge; and (c) development of skills and tech= niques to combat crime and delinquency.

A number of projects have been launched in this respect and generous financial grants from the Human Sciences Research Council have enabled the Institute to do research into the parole system of South Africa. Financial support has also been derived from the Council of the University of South Africa and a variety of other sources.

Research projects, seminars, symposia and training programmes are practically oriented, but the necessary theoretical approach and perspectives are also included. By bring= ing together persons actively engaged in research, teaching and practice in the field of criminology, the Institute for Criminology tries to establish an effective and ra= tionalised approach to the crime problem.

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, international business law, EEC law, maritime law, international aviation 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, with care being taken not to duplicate services, provided by the legal profession;
- Subject to the same caveat, 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 as well as international business, EEC, maritime and international aviation law for the benefit of the whole country.

The Institute is also developing, as a branch of the same organization (1) the VerLoren van Themaat Centre for International Law, with research functions and a spesialised library on all fields of international law, and (2) a section on indigenous law.

The Institute regularly publishes <u>The Comparative and International Law Journal of</u> <u>Southern Africa</u> and <u>The South African Yearbook of International Law</u>.

INSTITUTE FOR LABOUR RELATIONS

The Institute for Labour Relations commenced its activities as a research institute of the University of South Africa in January 1976. It is financed largely from its own revenue, donations from the private sector and University grants.

The Institute conducts interdisciplinary research in labour relations, offers a nine months' programme of part-time training and supplies its members with information. Its research findings are released by means of regular publications, including the quarter= ly South African Journal of Labour Relations. Information is disseminated to members through a monthly newsletter, <u>Current Labour Awareness</u> and documentation covering a wide range of subjects.

Membership is open to all organizations at an annual fee of R200,00. Members receive all Institute Publications and a free copy of the monthly newsletter. They are also entitled to small-scale consultations and are given a discount and preference in respect of seminar discussions.

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 Theology and the publication of research information and results.

Since the establishment of the Institute in May 1975, the following seven 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 minimise duplication in research.
- Development of an information retrieval system on Old Testament literature
- Ecumenical project: Discussions between different churches on various subjects prepared for publication.

TAX AND BUSINESS LAW CENTRE

The Tax and Business Law Centre was founded in August 1976 in the Department of Mercan= tile Law of the University of South Africa.

The main objectives of the Centre are to undertake and foster research in all fields of mercantile law. The results of this research are published in <u>Modern Business Law</u>, a law journal published by the Department of Mercantile Law.

In addition, the Centre offers a specialised one year programme in tax law.

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 -
 - . the 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 which was founded in 1965, provides for specific needs of students. The transition from school to university leads to uncertainty among many students in respect of choice of a course of study leading to a career, and the choice of subjects within the course. Students also have personal and adjustment problems, problems in connection with academic progress, study methods, etc. The Bureau assists these students by guidance and psychotherapy and refers serious cases to the clinical psychologists attached to the Students' Health Service on a part-time basis.

All first-year students are examined during the orientation period before the commence= ment of the academic year, by means of a comprehensive battery of tests in order to ob= tain information with regard to their aptitudes, abilities, interests and general ad= justment.

Research is undertaken regarding the aptitudes and personality characteristics of students, the reason for academic failure in the different year groups and courses, as well as other matters concerning students.

The Bureau has an outstanding reading laboratory where students are assisted in overcoming poor reading techniques by means of courses in advanced reading skills as well as in effective study methods.

INSTITUTE FOR CARTOGRAPHIC ANALYSIS

The Institute, which functions within 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 with=
 in the University, as well as to private and public institutions and individuals out=
 side the University;
- to undertake lecturing on advanced cartographic techniques and procedures.

INSTITUTE FOR ELECTRONICS

The Institute was established in 1976 within the Faculty of Engineering as a research and service centre. It is attached to the Department of Electrical Engineering. The Institute undertakes research and development work in the fields of Electronic and Electrical Power Engineering for other departments of the University as well as outside bodies, and specifically for the industry, government and semi-government bodies.

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INSTITUTE FOR ENTREPRENEURSHIP AND MANAGEMENT

This Institute is a research and training unit of the Post-graduate School of Manage= ment 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.

Although the constitution of the Institute provides for the promotion of language in= struction in South Africa over a wide terrain, definite priorities have been determined by the needs of the community in whose service the Institute stands. It is especially in connection with the two official languages as well as the most important languages of the Blacks that the Institute wants to try and make provision for more effective lan= guage instruction and aids in schools, universities, commerce, industry, etc.

Its service includes, inter alia, 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
 - . organisation 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.

INSTITUTE FOR POLYMER SCIENCE

The Institute was established in 1977 to undertake research projects, both applied and basic in nature; to help the polymer industry with the expansion of regional knowledge through the creative renewal of existing processes and the transfer of knowledge with regard to new technological developments; to undertake problem-solving studies that re= quire technical insight; and especially to offer facilities for post-graduate study in polymer chemistry.

The main fields of research are desalination, ultrafiltration, liquid rubbers, thermoplastic elastomers, foams (rigid), polymer reinforcement and anionic polymerisation.

INSTITUTE FOR STRUCTURAL ENGINEERING

The Institute was established as a research and service centre within the Faculty of Engineering during 1976. The objectives of the Institute are, <u>inter alia</u>,

- to undertake research projects in the field of structural engineering;
- to undertake research in the field of information systems for technology;
- to contribute to the facilities necessary for research and training in the Faculty;
- to undertake lecturing on an advanced level, give guidance and stimulate research within the Faculty;
- to give lecturing staff of the Faculty the opportunity to participate in the Institute's activities on a part-time basis.

INSTITUTE FOR THE TEACHING OF MATHEMATICS AND SCIENCE

The Institute was established towards the end of 1977, as a research and service centre functioning within the Faculty of Science. The aim of the Institute is to promote in= struction and interest in Mathematics and science subjects at school level as follows:

- To design and offer in co-operation with the Cape Education Department, a comprehensive programme of in-service training courses for subject teachers in Biology, Mathematics and Physical Science;
- to undertake research in the professional training and subject method didactics of prospective subject teachers in view of the evaluation of existing systems and the possible improvement and innovation thereof; and
- to undertake research on the instruction of these subjects at school level in view of evaluating and improving syllabuses and teaching methods.

A two-year part-time in-service training course for subject teachers who are not fully qualified in the aforementioned fields commenced at the beginning of 1978.

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SOUTHERN UNIVERSITIES NUCLEAR INSTITUTE

See University of Cape Town, p. 156.

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 trans= port;
- to undertake specific projects 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

RESEARCH UNIT FOR POLYENE CHEMISTRY

This Unit is attached to the Department of Chemistry. Research includes investigations on the isolation, structural elucidation, synthesis and application of physiologically active compounds, e.g. mammalian and insect pheromones, terpenoids, flavouring mate= rials, pyrethroid insecticides, the Wittig-reaction, and polyene synthesis.

RESEARCH UNITS AND GROUPS SUPPORTED BY THE MRC

CLINICAL CYTOLOGY RESEARCH GROUP

This Group which was established in 1974, undertakes research in various areas where a clinical application for cell biology may be found. Cytogenetics, the study of chro= mosomes, constitutes an important part of the research activities. The chromosome con= figurations in various disease entities and clinical syndromes are investigated, both before and after birth. The morphological and physiological characteristics of both normal and cancer cells are being studied. These observations are important in order to make an earlier and more accurate diagnosis of cancer of the female genital tract, the bladder, the lungs and other body cavities. The research in spermatology is being applied in the investigation and treatment of infertility cases.

IODINE METABOLISM RESEARCH UNIT

This Unit was originally established in 1961 under the CSIR to perform research on io= dine metabolism. This includes the normal pattern as well as any pathological condi= tions 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.

All these studies are especially directed at the design of better diagnostic tests and preparations.

LUNG METABOLISM RESEARCH GROUP

This Group was established in 1975 to investigate the metabolism of lung cells by means of biochemical, histochemical, histological, cytological and electron microscopical techniques.

MOLECULAR AND CELLULAR CARDIOLOGY RESEARCH UNIT

This Unit was established in 1971 to study the structure and function of the heart at the level of cells and molecules intensively and in integrated fashion, so that devia= tions occurring during heart disease can be better understood and treated.

NEUROCHEMISTRY RESEARCH UNIT

This Unit was established in 1977 for the purpose of studying the nervous system by means of chemical and biochemical techniques. Investigations are being conducted into a variety of physiological and pathological processes with a view to improving the knowledge, investigation and treatment of neuropsychiatric disorders.

RESEARCH GROUP FOR DENTAL EPIDEMIOLOGY

This Group was established in 1977 to study the etiology, prevalence, incidence and distribution of dental and mouth diseases; establishing criteria for the early diagnosis of lesions which may become malignant and to supply data for the planning of oral health services.

RESEARCH GROUP FOR THE DIFFUSE OBSTRUCTIVE PULMONARY SYNDROME

This Group, which was established in 1974, studies airway obstruction together with other lung pathologies including interstitial pulmonary disease and immune disorders. The research projects are aimed at obtaining a better understanding of the mechanisms of these diseases, and at seeking and establishing improved diagnostic procedures.

UNIVERSITY OF THE WESTERN CAPE

INSTITUTE FOR CHILD GUIDANCE

The Institute was established in 1976 to serve a threefold function: training and re= search in the field of child guidance and diagnosis of and help to children with learn= ing, emotional and educational disorders.

Training: The Institute offers a one-year full-time Specialised Diploma in Child and Youth Guidance. Apart from this an endorsement in Remedial Teaching can also be obtained.

Research: There exists, mainly in the field of orthopedagogics, a need for more know= Tedge of the cause and incidence of child and youth problems. Methods of diagnosis, treatment and prevention are investigated thoroughly. Research projects with this in mind are undertaken by the Institute.

<u>Service to the public</u>: As training and research depend upon the practical situation, children with learning, behavioural and educational problems are referred to the Institute for examination, treatment or further referral for specialised therapy. Provision of prothesis or placement in special classes, schools or institutions also follows such investigations.

Family and marriage counselling at the Institute, as well as guidance in the community, forms an integral part of prevention services.

INSTITUTE FOR SOCIAL DEVELOPMENT (ISD)

Already in 1967 a Bureau for Socio-Economic Research was founded at the University Col= lege of the Western Cape. This Bureau, known later as the Bureau for Socio-Scientific Research, was to conduct 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 fulltime basis, with the teaching staff of other departments co-operating on specific pro= jects.

Studies completed in association with the Bureau include, <u>inter alia</u>, two reports on Psychological Testing of First-Year Students at UCWC; reports on Academic Performance and Socio-economic Background of UWC Students; Standardised Tests for School Children; Absenteeism of Coloured Female Labour; Relationship between Teacher and Community; and Household and Family Life in Bellville South - A socio-economic study.

During 1975 the Bureau was reorganised 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, prima= rily 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 (IHR)

The Institute was founded in 1975 to conduct in-depth research on the history of race relations in South Africa, to enrich and broaden scientific and responsible insight, to present the development and historical contribution of all population groups in a wide and responsible perspective, to cultivate a lively interest in the South African past among the various population groups, to publish its findings, and to establish a suit= able and extensive documentation centre.

UNIVERSITY OF THE WITWATERSRAND

AFRICAN STUDIES INSTITUTE

This Institute was established in 1972. 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; to hold regular seminars, meetings and conferences, and to publish the results of these researchers and meetings.

ARCHAEOLOGY RESEARCH UNIT

The Unit is primarily concerned with the study of the technology and culture of the earliest farmers, builders and metal producers in South Africa. The vast scale of the evidence has obliged the Unit to specialise geographically in the area Johannesburg-Heidelberg-Warmbaths-Zeerust-Christiana.

The Unit also has important commitments in the study of prehistoric hunter-gatherer communities in the Transvaal from Later Pleistocene onwards.

BERNARD PRICE INSTITUTE OF GEOPHYSICAL RESEARCH

The Institute which was founded in 1937, 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.

Research is undertaken in isotope geophysics, marine geophysics, gravity, seismic source mechanism, crustal structure, origin of crypto explosion structures.

BERNARD PRICE INSTITUTE FOR PALAEONTOLOGICAL RESEARCH

The Institute, established in 1949, collects and studies Karoo and Pleistocene fossils. Housed in the substantial Douglas Smit House, it ranks as one of the five foremost in= stitutes in the world with a unique coverage of the entire field of palaeontology. It publishes its own journal, <u>Palaeontologia Africana</u>, and maintains a library and museum. Besides undertaking research in vertebrate palaeontology, palaeobotany (including coal), sedimentology and micropalaeontology, the staff of the Institute teaches in the relevant University departments. The institute provides research facilities to workers from out= side the University.

BUREAU FOR MINERALS STUDIES

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The Bureau was brought about by the existing mutual needs and interests of the Universi= ty and the minerals industry. It embraces those departments that carry out teaching and research in the fields of science and engineering concerned with the minerals in= dustry. The objectives of the Bureau are better co-ordination and training for the mi= nerals industry; promotion of research in areas of interest to the minerals industry; encouragement of youth interest in minerals science and engineering.

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. The broad aims of the Unit are to in= vestigate problems in the fields of carbohydrate and lipid metabolism such as coronary artery disease, obesity, hypo- and hyperlipidaemic states, and hypo- and hyperglycaemic syndromes. Such studies embrace a number of diseases which are major causes of mor= bidity and mortality. The investigative approach attempts to exploit to the full the unique research coportunities provided by the existence of different ethnic groups in the Republic.

CARDIO-VASCULAR RESEARCH UNIT

The Cardio-Vascuiar Research Unit which works in collaboration with the Departments of Medicine and Thoracic Surgery, continues to direct its programme towards the following:

- A study of the functional anatomy and pathology of the mitral valve
- An investigation of cardiac conduction defects and arrhythmias with emphasis on epidemiology, mechanisms of production and treatment by electrical pacing
- A study of the long-term follow-up of patients who have had heart valve replacements with either tissue or prosthetic valves.

CENTRE FOR APPLIED LEGAL STUDIES

The Centre was established in 1978 by the Carnegie Corporation of New York and the Uni= versity of the Witwatersrand. It aims to carry out research into areas of the law af= fecting the Black community and civil rights issues. It will also co-ordinate research amongst students and members of staff in the areas of interest falling within its ju= risdiction.

CENTRE FOR CONTINUING EDUCATION

The Centre provides the public with opportunities for further study in the form of courses, lectures, seminars and summer schools. Programmes are devised for special in= terest groups, such as adult educators and child care workers. It arranges continuing education programmes for members of the professions in collaboration with academic de= partments.

The division of Continuing Medical Education has been established to provide an educa= tional service for all health-related professions. It has an active research and de= velopment programme in the education of advanced clinical nursing.

ECONOMIC GEOLOGY RESEARCH UNIT

The Unit was founded in October 1957. It was established for the purpose of carrying out basic research into the factors controlling the distribution and localisation of mineralisation in Southern Africa, and of developing new approaches to mineral explo= ration, which can be adapted to the specific needs of the mining industry in South Africa.

The fields in which the Unit has developed special interests include, <u>inter alia</u>, the sedimentological and stratigraphic analysis of the Precambrian sedimentary basins which house the major proportions of South Africa's mineral wealth; the crustal evolution of Southern Africa; the geology and mineral deposits of the Witwatersrand and Transvaal basins; and the geology and mineral deposits of the greenstone belts and granitic ter= rains which constitute the very primitive crust of the Earth.

ENTOKOZWENI WELFARE CENTRES

There are two Entokozweni centres, one in Moletsane, Soweto and the other in Alexandra Township.

Both centres provide day care for the pre-school children of working mothers, recrea= tional activities for children and adults and, in the case of Alexandra Centre, a case= work service. The students are represented on the Entokozweni committees and university departments have also been active in research programmes at the two centres.

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ERNEST OPPENHEIMER INSTITUTE OF PORTUGUESE STUDIES

The Institute, an autonomous body within the University, was established in 1953 to promote the understanding of Portuguese culture through teaching and research. The Institute maintains an exceptional library. It further aims at improving the teaching of Portuguese language, literature, history and civilization to English-speaking stu= dents.

INSTITUTE OF 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, represen= tatives 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 red cell metabolism in kwashiorkor, the metabolism of drugs in malnutrition, elucidation of vitamin D deficiency in Johannes= burg, the effects of malnutrition on the digestive processes and research into the most effective methods of health education and prevention of malnutrition.

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 with special reference to stress states in bins and block caves; study of blasting phenomena, using a high-speed camera for stress wave and fracture information; health and safety aspects of underground environments; statistical aspects of the mechanical strength of rock structures; open pit design algorithms; investigations in mineral economics.

NATURAL PRODUCTS CHEMISTRY RESEARCH GROUP

The Group was established in January 1978 in the Department of Chemistry with a tenure of 5 years. Research comprises the study of Proteaceae and Hepaticae together with ventures into synthetic organic chemistry which arise from and are required for the purpose of such studies.

NUCLEAR PHYSICS RESEARCH UNIT

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The Unit is funded by a number of statutory bodies as well as from the private sector and the University, and conducts research in pure and applied nuclear physics. The major facilities of the Unit consist of an EN Tandem van de Graaffaccelerator, a 2MV Cockcroft Walton accelerator, an Ion Implanter, a Neutron Generator and a 3 KCi cobalt-60 irradiation unit, all of which are supported by sophisticated computing and detecting facilities. The reactor of the South African Atomic Energy Board is used on a generous scale.

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 situated in a reserve of 500 sq.km at Sinamwenda on the Southern shore of the lake and at the mouth of the Mwenda River. Re= search 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 effects of the creation of Lake Kariba on the plant and animal life of the middle Zambesi.

PHOTOSYNTHETIC NITROGEN METABOLISM RESEARCH UNIT

The aim of this research unit is to study at a fundamental level the interaction of nitrate assimilation and the rate of photosynthesis and photorespiration in green plants.

A present hypothesis is that photorespiration may function as a pathway for the production of amino acids utilizing carbon skeletons of recent photosynthetic origin.

PNEUMATIC CONVEYING RESEARCH GROUP

The Group has been established within the School of Mechanical Engineering to act as a service to industry in the field of pipeline transportation of solids. Its primary objectives are to undertake fundamental research in this area; to carry out development work on specific systems and concepts; and to provide a design consultation service to industry.

PRIMATE BEHAVIOUR RESEARCH GROUP

The Group which was established in January 1974, is devoted primarily to the study of the behaviour of prosimian primates in semi-natural laboratory settings and in the field. At present the laboratory houses all species of prosimian primate indigenous to South Africa. The aim of the research is to establish reliable and detailed ethograms of the behaviour of each species throughout its life cycle.

Studies of higher primates, indigenous to South Africa, on hormonal correlates of be= haviour in the Chacma Baboon and the Vervet Monkey are also under way at the University's Central Animal Unit at Frankenwald.

PROGRAMME FOR RESEARCH IN THE FIELD OF MUSIC

The research Programme established in 1976, allows members of staff and post-graduate students to carry out study and research in various aspects of musicology and musical composition. Ph.D. candidates are at present undertaking research into twentieth cen= tury Italian opera and contemporary string terminology in association with the Programme. The use of Shakespeare's plays as opera libretti is also being investigated.

UNIVERSITY COUNCIL HYDROLOGICAL RESEARCH UNIT

The Unit is being promoted by the Water Research Commission as a centre of competence in mathematical modelling of hydrological systems. Major research contracts have been entered into with the Commission in the fields of water resources and floods studies, and waste-water circulation in the PWV complex.

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 to undertake research mainly for town and regional planning within the Pretoria-Witwatersrand-Vereeniging region. Present pro= jects include the social ecology of the region, socio-economic trends, an analysis of land-use and industrial aspects and the application of mathematical modelling to urban analysis.

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RESEARCH GROUP AND UNIT SUPPORTED BY THE CSIR

CLIMATOLOGY RESEARCH GROUP

The Group was formed during 1977 around a nucleus of climatologists working in the University Department of Geography and Environmental Studies. It is funded by the Na= tional Programme for Environmental Sciences of the CSIR. Research includes, inter alia, work on recent climatic change over South Africa; the manner in which cities modify cli= mates; inversion climatology; and the relationships between crops and weather.

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 using X-ray diffrac= tion; electron and nuclear magnetic resonance, and lasers and in low temperature phy= sics including superconductivity. Efforts are made to direct studies towards materials of local economic importance such as diamonds and hard metals. The techniques of solid state physics are also applied to the study of biological materials.

RESEARCH INSTITUTE AND UNITS SUPPORTED BY THE MRC

DENTAL RESEARCH INSTITUTE

The Institute was founded in 1954 as a joint venture with the CSIR, whose supporting role was taken over in 1970 by the MRC. The research covers a broad field and is aimed at solving clinical problems, particularly those affecting the inhabitants of South Africa.

IRON AND RED CELL METABOLISM RESEARCH UNIT

This Unit was established in 1969 for the purpose of studying iron and red cell meta= bolism in the various ethnic groups in South Africa. Currently the Unit is trying to develop practical and economical methods for fortifying staple foods with an easily absorbed form of iron.

The Unit is also concerned with the pathogenesis of the iron overload that occurs so commonly in the local South African population and with the pathological sequelae of this condition.

RESEARCH UNIT FOR TRANSPLANTATION AND SURGICAL IMMUNOBIOLOGY

The Unit was established as the Group for Research in Organ Transplantation by the MRC in January 1974. The activities of the Unit embrace both the clinical and experimental laboratory aspects of transplantation.

CHAPTER 6

LIBRARIES AND MUSEUMS ATTACHED TO UNIVERSITIES

LIBRARIES

UNIVERSITY OF CAPE TOWN

UNIVERSITY LIBRARY

The University Library, consisting of approximately 741 000 volumes, is housed in eight libraries: the J.W. Jagger Library (three linked divisional libraries), the Architec= tural Library, the Brand van Zyl Law Library and the Carleton Harrison Education Libra= ry, Rondebosch; the Medical Library, Observatory, and the Institute of Child Health Li= brary, Rondebosch; the Music Library, Rosebank; the Hiddingh Hall Library, Cape Town.

The J.W. Jagger Linear Library is the headquarters of the University Library Service. It contains 518 000 volumes and has readingrooms which can accommodate 1 280 readers. The Jagger Library receives about 5 250 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 <u>Medical Library</u> 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 Associa= tion. The library contains approximately 92 000 volumes, including the collection of the Medical Association of South Africa (Cape Western Branch). About 1 127 medical pe= riodicals are received in the Medical Library.

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The <u>Institute of Child Health Library</u> which is a sub-branch of the Medical Library specialising 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-casettes, video-casettes and tape-slide programmes with the necessary viewing and listening equipment.

The <u>Hiddingh Hall Library</u> contains about 50 000 volumes of books and periodicals in the fields of Accounting, Fine Art and Dramatic Art.

The <u>Music Library</u> is in the College of Music. Turntables are available in specially equipped listening rooms. The collection consists of 10 000 books and bound periodicals on music and ballet, approximately 36 800 items of printed music and 11 600 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 19 000 volumes on architecture and allied subjects, together with collections of photo= graphs, 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 Quan= tity Surveyors are housed in this library.

The Brand van Zyl Law Library: The collection consists of 20 500 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 <u>Carleton Harrison Education Library</u> is in the Education Building. The collection consists of 27 000 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.

Africana and Special Collections Division

That portion of the library's stock which, because of rarity, fragility or value, is not available for loan, is administered by the Africana and Special Collections Division which has its own reading room in the Jagger Library. They include the following:

- The <u>Africana Collection</u> consists of books, periodicals, pamphlets, official publica= tions and original manuscripts, particularly on Southern Africa. The collection in= cludes a large number of the works of early travellers and missionaries.
- The <u>Ballot Collection</u> 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 Eng= lish readers of the times.
- The <u>Cameron-Swan Collection</u> contains some 400 volumes on Scottish literature, history, culture and thought.
- The Crawford Collection of monographs on mathematics.
- The <u>Kipling Collection</u> 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 <u>McGregor Collection</u> 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 in= cunabula. Included in the collection are specimens of book illustration, fine print= ing and fine binding.
- The <u>Sibbett Collection</u> 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 and 19th centuries.
- The Willis Collection contains 900 volumes on naval and aeronautical history.
- The <u>Medical History Collection</u>, 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 his= tory of the Medical School.
- <u>Music Africana</u>, housed at the Music Library, consists of music by South African com= posers or concerning South African subjects.
- The Van Zyl Collection consists of about 2 500 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 1 500 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 approximately 120 000 volumes at the end of 1978. Special collections include Indiana and Fine Arts.

UNIVERSITY OF FORT HARE

HOWARD PIM LIBRARY

The Library was founded in 1916 and in 1918 contained 450 volumes. On 1 January 1979 the book stock amounted to more than 10 000 volumes. The Library subscribes to over 1 000 periodicals. It contains a valuable Africana collection known as the Howard Pim Collec= tion of Africana.

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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 se= lection of periodicals is circulated and exchanged regularly between Durban and Pieter= maritzburg.

University Libraries in Durban

MAIN LIBRARY, MEMORIAL TOWER BUILDING

This library houses books and periodicals in the subject fields covered by the Facul= ties of Arts, Commerce, Education, and Social Sciences, and certain departments of the Faculty of Science (viz Geology and Psychology). It contains about 175 000 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 10 000 volumes, serves the Faculty of Architecture and Allied Disciplines (which includes the Depart= ment of Town and Regional Planning).

Eleanor Bonnar Music Branch Library: This library serves the Department of Music, and contains about 3 000 volumes.

G.M.J. Sweeney Law Branch Library: This library serves the Faculty of Law with a collec= tion of more than 10 000 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 33 000 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 33 000 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 44 000 books and pam= phlets and specialises in South African Church History and in Bantu Africana. Some in= teresting items include the Colenso letters and papers and Colenso's <u>Commentary on Frere's Policy</u> with marginal notes in his own handwriting; Chase's <u>Natal Papers</u>, Moodie's <u>Re=</u> cords and Chadwick's Commentaries on Native Law.

University Libraries in Pietermaritzburg

MAIN LIBRARY

This library was established in 1912. It serves the Faculties of Arts, Science, Commerce and Education and is the administrative headquarters for the campus collection of about 200 000 volumes housed in the main building, the departmental collections and the branch libraries. There is a collection of Africana with the main emphasis on Natal. The St Saviour's Cathedral library is housed here.

AGRICULTURAL FACULTY LIBRARY

Prior to 1973, this was the Natal Region Library of the Department of Agricultural Tech= nical Services. It serves the staff and students of the Agriculture faculty.

LAW FACULTY LIBRARY

This branch library serves the staff and students of the Faculty of Law.

UNIVERSITY OF THE NORTH

UNIVERSITY LIBRARY

The Library contains 94 672 volumes. The staff consists of 9 professional members and 15 non-professional members.

UNIVERSITY OF THE ORANGE FREE STATE

UNIVERSITY LIBRARY

The Library contains about 330 000 volumes which include a special collection on Africana and the Henriëtta Stockdale Collection (Nursing Archives).

Branch libraries

The Medical Library known as the Frik Scott Library is housed in the building complex of the Faculty of Medicine.

The <u>Music Library</u> is housed in the Conservatorium of Music and the following music ma= terial is available: gramophone records, sheet music and miniature scores.

The <u>Rabie Saunders Library</u> in the Faculty of Agriculture houses the agriculture collec= tion 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 225 000 vol= umes, the L.C. Steyn collection of books on Roman-Dutch Law being the most outstanding special collection. Periodicals currently received number 3 000.

POTCHEFSTROOM UNIVERSITY FOR CHE

FERDINAND POSTMA LIBRARY

This is the main university library and contained 425 888 volumes in 1978. The library has four branch libraries, viz the Music library, the Theological library, the library of the University's campus at Vanderbijlpark and a special library for a number of the pure and applied sciences. Special collections include the Carney Africana Collection, the Hertzog Collection of Roman Dutch Law and the Ossewa Brandwag Collection.

The library compiles the <u>Union Catalogue of Theses and Dissertations of the South Afri</u> <u>can Universities</u> and <u>Abstracts of Theses and Dissertations accepted for Higher Degrees</u> <u>at PU for CHE</u>.

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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 600 000 bound volumes, the library also has a special study collection to provide for the needs of the under= graduate students. A staff of subject librarians specialises 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

H.F. VERWOERD LIBRARY

The library subscribes to more than 4 000 serial publications and holds more than 250 000 volumes comprising approximately 190 000 titles. The library which was established in 1967, has successfully computerised all processes in the library.

RHODES UNIVERSITY

UNIVERSITY LIBRARY

The books and bound periodicals in the library totalled 240 207 volumes at the end of 1978.

Special collections include the Stanford Collection of rare books, the Gutsche Law Collection and the Ichthyology Collection.

Cory Library for Historical Research (housed in the main library): The nucleus of this Library is the collection of books and manuscripts bequeathed to Rhodes University Col= lege by the late Sir George Cory. The library includes a valuable collection of books and pamphlets, Cape and British Parliamentary Papers, files of local newspapers, and a large collection of manuscripts and documents relating to the history of Southern Africa, with special reference to the Eastern Cape.

LEATHER INDUSTRIES RESEARCH INSTITUTE LIBRARY

The library, which contains more than 3 000 volumes, specialises 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 en= rolled 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 750 000 volumes. It specialises in the fields of Bantu Languages and Recent Literature on Africa. Special collections include the Van Schaik Afri= cana Collection; Government Publications (S A); Collection on German contribution to South African Culture; Law Library (specialising 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, Engineering, Commerce and Administration and the Department of Che= mistry.

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 gramo= phone records are housed in the library of the Conservatorium of Music.

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The D.F. Malan Museum is housed in the Carnegie Library.

UNIVERSITY OF THE WESTERN CAPE

UNIVERSITY LIBRARY

The library has a collection of 86 609 volumes and subscribes to about 901 periodicals. It contains an Africana collection with the emphasis on Cape history, Afrikaans Litera= ture and South African politics. During 1978 the Library acquired the Fransie Malherbe collection of about 4 000 volumes on Afrikaans and Dutch Language and Literature.

UNIVERSITY OF THE WITWATERSRAND

UNIVERSITY LIBRARIES

The University libraries consist of two central libraries and eighteen divisional and constituent libraries. The bookstock of all these libraries numbers 645 000 volumes, and the system employs some 160 library staff.

<u>Central libraries</u>

The Wartenweiler Library is primarily an undergraduate teaching library largely orien= tated to students in the Faculty of Arts. The stock consists of some 5 000 books on closed access.

The William Cullen Library is primarily orientated to reference and research. It houses a reference collection, periodicals, government publications, theses and some special collections. It includes a Reference and Periodicals Reading Room.

Among the special collections housed in the central libraries are: Gubbins, Humphreys and Jeffries Collections of Africana; Landau Collection of Hebraica and Judaica; Early Printed Books (including nearly a hundred incunabula); Historical and Literary Papers (including the Central Record Library of the Church of the Province of South Africa); Ernest Oppenheimer Institute of Portuguese Studies; South African Association for the Advancement of Science; Egyptology and Archaeology.

The University Library's catalogue has been computerised since 1976 and is available at all service points in microfiche form.

Divisional and constituent libraries

Biological Sciences; Business Administration; Dental; Earth Sciences; Engineering; Fine Arts/Architecture/Quantity Surveying/Building Science/Town and Regional Planning; Geo= graphy; Geophysics; Law; Mathematical Sciences; Medical Library and Baragwanath Hospital Branch; Music/Theatre Arts; Nuclear Physics; Palaeontology; International Affairs (in Jan Smuts House which includes the Library of the South African Insitute of International Affairs and the Library of the late Field-Marshal J.C. Smuts).

UNIVERSITY OF ZULULAND

UNIVERSITY LIBRARY

The library contained 83 409 volumes at the end of 1978. Approved posts in the library at the end of 1978 were 18.

MUSEUMS

UNIVERSITY OF CAPE TOWN

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 mineralogi= cal 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 fasci= nating 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 craftmanship of other cul= tures. The unique and extremely valuable private collections include, inter alia, Egyp= tian and archaic Greek, oriental and pre-Columbian art; religious art of several kinds; central European carnival masks and African tribal carving.

UNIVERSITY OF FORT HARE

F.S. MALAN MUSEUM

The Museum was established in 1941 as an ethnological study museum under the Department of African Studies, 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 Edu= cation 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 con= sists 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.

In 1965 a gallery of contemporary African art, the <u>A.J.D. Meiring Art Gallery</u>, was added to the museum. The gallery is much involved with the promotion of African art and Afri= can artists.

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 <u>Adler Museum of the History of Medicine</u> is the only museum of its kind in South Africa and contains interesting and valuable collections depicting the history of medicine, pharmacy and dentistry through the ages. The museum arranges public lectures and exhibitions of medical interest and provides excellent facilities for medical historical research.
- The <u>Archaeology Museum</u> in the Archaeological Research Unit 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. Over 100 actual specimens of rock engravings and paintings are displayed. One of the largest collections of Trade Beads in the world is available for inspection and is also displayed to depict the origins of African Trade.
- The <u>Bleloch Museum</u> 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 1 413 specimens of diseased organs and tissues removed surgically from human patients.
- The Dental Museum in the Oral and Dental Hospital consists of two comprehensive col= lections, 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 con= tains several hundred specimens of abnormalities of teeth, together with others co= vering all aspects of diseases of the oral region.
- The <u>Hunterian Museum</u> in the Department of Anatomy at the Medical School contains an extensive collection of human and comparative anatomical specimens, X-rays, 8 000 projection slides, embryological models, casts and abnormalities. Among its trea= sures 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 major part of the collection.

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- The <u>Museum of Obstetrics and Gynaecology</u> consists of approximately 200 carefully selected specimens illustrating gynaecological diseases and approximately 150 selected specimens illustrating conditions related to pregnancy.
- The <u>Palaeontology Museum</u> 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, illus= trates the kinds of fossils recovered from the Sterkfontein and other similar Trans= vaal caves, some aspects of hominid evolution, and the past and present fauna from within and around the caves.
- The <u>Social Anthropology Museum</u> contains approximately 1 300 items of material cul= ture. 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 <u>Sutherland Strachan Museum</u> is housed in the Old Medical School Building and contains over two thousand pathological specimens.
- The <u>Museum of Wireless</u>, Radio and <u>Electronics</u> 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 <u>Zoology Museum</u> 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 MUSEUMS NEAR UNIVERSITIES

<u>Bloemfontein</u>, Orange Free State National Museum, 36 Aliwal Street, P.O. Box 266, Bloemfontein 9300 War Museum, P.O. Box 704, Bloemfontein 9300

<u>Cape Town</u>, Cape Province South African Museum, P.O. Box 61, Cape Town 8000

Durban, Natal

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Durban Museum, City Hall, Smith Street, P.O. Box 4085, Durban 4000

<u>Grahamstown</u>, Cape Province Albany Museum, Somerset Street, Grahamstown 6140

<u>Johannesburg</u>, Transvaal Museum of Military History, P.O. Box 52090, Saxonwold 2132

<u>Pietermaritzburg</u>, Natal Natal Museum, 237 Loop Street, Pietermaritzburg 3201

Port Elizabeth, Cape Province Port Elizabeth Museum, P.O. Box 13147, Humewood 6013

<u>Potchefstroom</u>, Transvaal Cultural History Museum, Municipality, P.O. Box 113, Potchefstroom 2520

<u>Pretoria</u>, Transvaal National Cultural History and Open-Air Museum, P.O. Box 3300, Pretoria 0001 Transvaal Museum, Paul Kruger Street, P.O. Box 413, Pretoria 0001

<u>Stellenbosch</u>, Cape Province Stellenbosch Museum, Grosvenor House, Drostdy Street, Stellenbosch 7600. INDEX OF FIELDS OF STUDY

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APPENDIX I

Subjects not included in the Board's list of subjects for the Matriculation Certificate recognised for exemption purposes when passed at other examinations(H. = Higher Grade; S. = Standard Grade):

GROUP F:

Agricultural Economics S. Aircraft Electrical Theory S. Aircraft Instrument Trade Theory S. Aircraft Maintenance Theory S. Aircraft Metalwork Theory S. Anatomy and Music S. Animal Husbandry S. Armament Fitting Theory S. Armature Winding Theory S. Bakers' Theory S. Ballet S. Bantu Administration S. Bantu Law S. Boatbuilding Theory S. Bricklaying and Plastering S. Bricklaying and Plastering Theory S. Building Construction Theory S. Business Economics S. Butchers' Theory S. Carpentry and Joinery Theory S. Carton Making Theory S. Coke and By-Product Process Theory S. Computer Science S. Construction Plant Trade Theory S. Diamond Trade Theory S. Diesel Electrical Theory S. Diesel Trade Theory S. Electrical Trade Theory S. Electrician-Work S. Electro Mechanics Theory S. Electroplating Theory S. Elevator Trade Theory S. Farm Mechanics S. Field Husbandry S. Ferro Metal Rolling and Shaping Processes Theory S.

Fitting and Machining Theory S. Fitting and Turning S. Footwear Theory S. Furniture Makers' Theory S. Furniture Polishing Theory S. Geology (Mining) T1 S. Graphic Art S. Gravure Machine Minding Theory S. Hairdressing Theory S. Hand Composition Theory S. History of Ballet, Costume and Theatre S. Horticulture Theory S. Hotelkeeping and Catering S. Housecraft S. Institutional Management S. Instrument Trade Theory S. Introduction to Criminology and Ethnology S. Iron Production and Casting Theory S. Jewellers' Theory S. Law of Criminal Procedure and Evidence S. Letterpress Machine Minding Theory S. Literature (Afr.) S. Literature (Eng.) S. Lithography Theory S. Machine Composition Theory (Linesetting) S. Machine Composition Theory (Monotype) S. Mercantile Law S. Metallurgical Process Theory (Ferro Alloy Section) S. Metallurgy (Mining) T1 S. Metalwork S. Mine Engineering T1 S. Mine Ventilation T1 S. Mining Coal T1 S. Mining Economics T1 S.

Mining (Metalliferous) T1 S. Monotype Theory (Including Photo= setting) S. Motor Body Repairing S. Motor Bodywork Theory S. Motor Electrical Theory S. Motor Machining Theory S. Motor Mechanics S. Motor Trade Theory S. Motor Vehicle Construction S. Moulders' Theory S. Music Composition S. National and Greek Dancing S. Needlework and Clothing S. Office Equipment Theory S. Packaging Theory S. Painting S. Painting and Decorating S. Painting and Decorating Theory S. Patternmakers' Theory S. Photography Trade Theory S. Photo Mechanics Theory S. Phototype Setting and Film Make-up Theory S. Plant Operation Theory S. Platers and Structural Steelworkers' Theory S. Plumbers' Theory S. Plumbing and Sheet Metalworking S. Practical Agriculture S. (Shall not be offered with Animal Husbandry S., Farm Mechanics S. or Field Husbandry S.) Practical Ballet S. Practical Music (Second Instrument or Singing) S. Public Administration S.

Radio Theory S. Radiotrician-Work S. Railway Signalling Theory S. Railway Vehicle Building Theory S. Refrigerator Theory S. Rigging Theory S. Rotary Stereotyping and Rotary Machine Minding Theory S. Rubber and Plastic Fitting Theory S. Scale Fitters' Theory S. Sheet Metalworkers Theory S. Signwriters' Theory S. Smithing Theory S. South African Criminal Law S. Statute Law S. Steel Production and Casting Theory S. Stone-work Theory S. Surveying (Mining) T1 S. Survival Equipment Fitting Theory S. Tailors' Theory S. Technical Drawing H. and S. Telecom Trade Theory S. Television Theory S. Toolmakers' Theory S. Tractor Mechanics S. Upholstery and Trimming Theory S. Vehicle Building Theory S. Warehouse and Binding Theory S. Watch-making S. Welders' Theory S. Welding and Metalworking S. Wood Machining Theory S. Woodwork S. Woodworking S.

GROUP C

Physiology H. and S. (not offered with Biology H. or S.)

GROUP D

Arabic S. Hindi S.

APPENDIX II

School examinations conducted by South African examining bodies which are recognised for purposes of exemption in terms of JMB regulations

Education Department	Examination
Cape Education Department	Cape Senior Certificate Examination
0.F.S. Education Department	0.F.S. Senior Certificate Examination
Natal Education Department	Natal Senior Certificate Examination
Transvaal Education Department	Transvaal Senior Certificate Examination
Department of National Education	National Senior Certificate Examination
Department of Education and Training	Senior Certificate Examination
Department of Coloured, Rehoboth and Nama Relations	Senior Certificate Examination
Department of Indian Affairs	Senior Certificate Examination

The minimum aggregate required for purposes of exemption in these examinations is 950 marks except in the case of the Transvaal where it is 1 425 marks.

APPENDIX III

Certificates, issued by examining bodies outside the Republic of South Africa, which are accepted for purposes of exemption in terms of JMB regulations

Name of examining body	Name of Certificate
Oxford and Cambridge Schools Examina= tion Board	General Certificate of Education
Oxford Delegacy	General Certificate of Education
Cambridge Syndicate	General Certificate of Education
Joint Matriculation Board of the Northern Universities	General Certificate of Education
Central Welsh Board	General Certificate of Education
University of London	General Certificate of Education
University of Durham	General Certificate of Education
University of Bristol	General Certificate of Education
Associated Examining Board	General Certificate of Education
Oxford and Cambridge Schools Examinations Board	Higher School Certificate
Oxford Delegacy	Higher School Certificate
Cambridge Syndicate	Higher School Certificate
Joint Matriculation Board of the Northern Universities	Higher School Certificate
University of London	Higher School Certificate
Associated Examining Board	M-level Certificate

APPENDIX IV

Certificates issued by examining bodies outside the Republic of South Africa which are accepted for purposes of exemption in terms of JMB regulations

The following certificates are recognised by the Board under such conditions as the Board may stipulate provided that they are as such as to entitle their holders to un= conditional admission as candidates for degrees or diplomas approved by the Matricula= tion Board at universities or other institutions in the country of origin approved by the Matriculation Board:

(a) The United Kingdom of Great Britain and Eire:

Name of examining body	Name of Certificate
Oxford and Cambridge Schools Examinations Board	School Certificate
Oxford Delegacy	School Certificate
Joint Matriculation Board of the Northern Universities	School Certificate
Central Welsh Board	School Certificate
University of London	Senior School Certificate
University of Durham	School Certificate
University of Bristol Cambridge Syndicate	School Certificate School Certificate

Note: In the case of the above eight certificates only subjects in which the candidate obtained "credit" or "very good" are accepted.

Name of examining body	Name of certificate
Scottish Education Department	Leaving Certificate
Secondary School Branch, Department of Education, Eire	Leaving Certificate
Ministry of Education, Northern Ireland	Senior Certificate
Board of Education, England	Teacher's Certificate
Scottish Education Department	Teacher's Certificate
	Forces Preliminary Examination
Royal Naval College, Dartmouth	Passing-out Examination

(b) Other recognised certificates:

Certificate of first class pass in the intermediate examination in Arts or Science of an Indian University.

Matriculation or other Entrance Certificate of any university approved by the Matricu= lation Board.

Leaving Certificate of an Education Department, which certificate entitles the holder to admission to degree courses at any university approved by the Matriculation Board.

Leaving Certificate of a secondary school or similar institution, which certificate entitles the holder to admission to degree courses at any university approved by the Matriculation Board.

Einddiploma, Gymnasium, Holland.

Einddiploma, Hoogere Burgerschool met vijfjarige cursus, Holland.

Hoofdakte/Akte van Bekwaamheid als Hoofdonderwijzer, Holland.

Diploma, Technische Hoogeschool, Delft.

Einddiploma, Middelbare (or Koloniale) Landbouwschool, Holland.

Staatsexamen, Holland.

"Gehomologeerd getuigschrift van middelbaar onderwijs van de hogere graad", issued by a Belgium athenium, lyceum,college, klein seminarie or vrij instituut.

"Getuigschrift van middelbaar onderwijs van de hogere graad", issued by the "Belgische Centrale Examencommissie".

"Gehomologeerd bekwaamheidsdiploma dat toegang verleent tot het hoger onderwijs, uitge= reikt door een inrichting van hoger middelbaar onderwijs, een lager normaalschool of een examenkommissie van de Staat".

"Diploma van toelatingsexamen aan het examen van kandidaat in de wis- en natuurkundige wetenschappen, van kandidaat landbouwkunde ingenieur en van kandidaat burgelijk inge= nieur".

"Gehomologeerd getuigschrift van humaniorastudiën door een inrichting van hoger middel= baar onderwijs of een lager normaalschool uitgereikt voor 31 Julie 1965 of door de cen= trale examencommissie uitgereikt voor 31 Januari 1968".

Diploma of the "Ecole Superieure de Jeunes Filles", Switzerland.

Abiturium at a Gymnasium or Oberrealschule in Germany or Switzerland.

Maturitäts-Zeugnis or Zeugnis der Reife at a Gymnasium or Oberrealschule in Germany or Switzerland.

Baccalaureat (B. es Lettres or B. es Sciences or B. en Droit, Second Part), France.

Licenza di Maturita Classica, Italy.

Licenza di Maturita Scientifica, Italy.

Matriculation Certificate of the Ministry of Education and Culture, Israel.

Certificate of the third cycle (seventh year) of a Portuguese Lyceum.

Certificate of the second complimentary course (Portugal).

Greek Apolytirion.

International Baccalaureate.

Canadian High School Diploma admitting to Senior Matriculation standing at Canadian Uni= versities (Junior Matriculation standing not accepted).

APPENDIX V

MAJOR SUBJECTS FOR B.A. (GENERAL) OFFERED IN THE FACULTY OF ARTS

African Development Administration : UNISA	Applied Anthropology : UOFS, UP
African Government : UW	Arabic : UDW, RAU, UNISA
African Politics : UNISA	Archaeology : UCT, UFH, UP, US, UW
African Studies : US	Art : UDW
Afrikaans : UDW, UPE, UP, UZ	Bantu Law : UP
Afrikaans and Netherlands Cultural History : UP	Biblical and Religious Studies : UW
Afrikaans Cultural Science and Folklore : US	Biblical Studies : UDW, UFH, UN, UNorth, UOFS, UPE, PU for CHE, UP, RAU, RU, UNISA, US, UWC, UZ
Afrikaans en Nederlands : UCT, UFH, UN, UNorth, UOFS, UPE, PU for CHE, RAU, RU, UNISA, US, UWC, UW	Church History : UNISA Classical Civilization : UN
Ancient History : UCT	Classical Culture : US
Anthropology: UDW, UFH, UNorth, UOFS, UPE, PU for CHE, UP, RAU, RU, UNISA, US, UWC, UZ	Classical Hebrew : UCT, UDW, UNorth, UNISA, UZ
	Classical Life and Thought : UW

Communication : RAU, UNISA Comparative African Government : UNorth Comparative African Government and Administration : UN Comparative African Government and Law : UCT Computer Science : UPE Criminology : UDW, UFH, UNorth, UOFS, PU for CHE, UP, UNISA, UZ Cultural History of Western Europe: UCT Cultural Science : PU for CHE Development Administration : PU for CHE, RAU, US Development Policy and Administration : UFH Development Studies : UZ Dogmatics and Ethics : UDW Drama/Dramatic Art : UCT, PU for CHE, UP, US Ecclesiastical History : RU Ecclesiastical History and Missiology : UFH Economic History : UCT, UN, RU, UW Economics : All the universities Economics of Agriculture : RU Education/Pedagogics : UDW, UNorth, UPE, RAU, UNISA, UZ English: All the universities Ethics : PU for CHE Fine Art : UN, UW Fine Art Studies : RU French : UCT, UN, UOFS, UPE, PU for CHE, UP, RAU, RU, UNISA, US, UWC, UW General Church History : UDW General Linguistics : UOFS, UPE, RAU, US General Literary Theory : UOFS, UPE General Literary Theory and Linguistics : PU for CHE Geography : All the universities Geology : UCT German : All the universities Greek : All the universities except UWC Gujarati : UDW Hebrew : UCT, UFH, UN, UOFS, UP, RAU, RU, UWC, UW Hebrew Culture : UCT Hellenistic Greek : UWC Hindi : UDW

Hindu Studies : UDW History : All the universities History of Art : UCT, UDW, UFH, UN, UOFS, PU for CHE, UP, RAU, UNISA, UW History of Drama : UW History of Music : UDW, PU for CHE, UP, UNISA, UW, UZ History of Philosophy : UZ Indian Philosophy : UDW Indigenous Law : RAU Industrial and Organisational Psychology : UPE Industrial and Personnel Psychology : PU for CHE Industrial Psychology : UWC, UZ Industrial Sociology : UDW, PU for CHE, RU, UW Information Science : RAU International Politics : UNorth, PU for CHE, UP, UNISA International Relations : UW Islamic Studies : UDW Italian : UCT, RAU, UNISA, US, UW Jewish Studies : UN Judaica : UNISA Latin : All the universities Legal Theory : RU Legal Theory and Institutions : UW Library Science : RAU Linguistics : UNorth, UP, RU, UNISA, UWC, UW Literary Studies : UNorth Logic : UNISA Mathematical Statistics : UN, UPE, UP, RAU, RU, UW Mathematics : All the universities Modern Hebrew : UNISA Music : UDW, UN, RU, US Music Theory : UZ Nederlands : UDW, UPE Northern Sotho: UNorth, PU for CHE, RAU, UNISA Pedagogics/Education : UDW, UNorth, UPE, RAŬ, UNISA, UZ Penology : UNISA Persian : UDW Philosophy : All the universities Phonetics : UW

Physical Education : UNorth, PU for CHE Political Philosophy : US Political Science : All the universities except RU Political Studies (African) : RU Politics : RU Portuguese : UNISA, UW Practical Music : PU for CHE, UZ Private Law : UFH, UNorth, UOFS, UPE, PU for CHE, RAU, UNISA, US, UWC, UZ Psychology : All the universities Psychology (Counselling) : UOFS Public Administration : UCT, UDW, UFH, UNorth, UPE, UP, UNISA, US, UWC, UZ Religious Studies : UCT Roman-Dutch Law : UCT, UP Roman Law : PU for CHE, RAU, UNISA Roman Law and History of Law : UOFS Roman Law and Jurisprudence : UCT Russian : UNISA, UW Sanskrit : UDW Science of Religion : UDW Semitica/Semitic Languages : UPE, PU for CHE, UP, US Shona : UCT Social Anthropology : UCT, UN, UW

Social Work : UOFS, UPE, RAU, UWC Sociology : All the universities Sotho : UCT, UP Southern Sotho : UFH, UN, UNorth, UOFS, UPE, PU for CHE, RAU, RU, UNISA, US, UW. 117 Spanish : UNISA Speech and Drama : UDW, UN, RU Speech and Interpretation : PU for CHE Statistics : UDW, UN, US Systematic Philosophy : UZ Systematic Theology : UFH, RU, UNISA Tamil : UDW Telugu : UDW Theatrical Art : PU for CHE Theology : UN Theory of Statistics : PU for CHE Tsonga : UNorth, UNISA Tswana : UNorth, PU for CHE, UNISA Urdu : UDW Venda : UNorth, UNISA Xhosa : UCT, UFH, UPE, RU, UNISA, US Zulu : UDW, UN, UOFS, PU for CHE, UP, RAU, . UNISA, UW, UZ

APPENDIX VI

UNDERGRADUATE SUBJECTS ACCORDING TO UNIVERSITIES : FACULTIES OF COMMERCE AND/OR ECONO= MIC SCIENCES

Accounting : All the universities Afrikaans en Nederlands : UN, RU, US, UWC, ЦW Accounts of Trustees, Liquidators and Executors : UPE, UWC, UW Agricultural Economics : UN, UNorth, UOFS, PU for CHE, RU Actuarial Science : UCT Analytical Techniques : RAU Administration of Estates : UDW, UFH, UN, UNorth, UOFS, UP, UNISA, UZ Anthropology : UDW, UPE, UP, RAU Administrative Law : UZ Applied Anthropology : UOFS Administrative Law and Interpretation of Applied Business Statistics : UCT Statutes : UDW Applied Computer Science :UFH Advanced Business Statistics : UCT Applied Mathematics : UW African Development Administration : UNISA Applied Mathematics, Computer Science and African Economic History : UCT Mathematical Statistics : UW African Language : UP, UNISA, UW Applied Psychology : UW Afrikaans : UDW, UN, UNorth, UOFS, UP. RU. Auditing : All the universities US, UWC, UW, UZ Banking : UCT, UNISA

Bantu Law and Administration : UOFS Business Administration : UCT, UN, RU Business Computer Science : UNorth Business Data Processing : UDW, UN, UOFS, RAU, RU, UW Business Economics : All the universities except UCT and UN Business Finance : UCT, UN, UW Business Law : UP Business Mathematics and Statistics : RU Business Policies and Agreements : UN Business Science : UCT Business Statistics : UWC Commercial Computer Science : UPE Commercial Law : UCT, UDW, UFH, UN, UNorth UPE, UP, RAU, UNISA, US, UW, UZ Communication/Communication Studies : UOFS, PU for CHE, RAU, UW Company Law : UCT, UN, UPE Comparative African Government : UNorth Comparative African Government and Administration : UN Compound Interest and Annuities Certain : UCT Computational and Statistical Applied Mathematics (CASAM) : UCT Computer Methods : PU for CHE. Computer Science : UCT, UN, UPE, UP, RAU, RU, UNISA, US, UW Computer Science for Teachers : UPE Computing and Applied Mathematics : RU Constitutional and Administrative Law: UFH, UOFS, JP, UW Constitutional Law : UN, PU for CHE, UWC Consumer Behaviour : UP Co-operation : UFH, UNorth, UNISA Cost Accounting : UNorth, PU for CHE, UNISA, US Cost and Management Accounting : UPE, UP, RAU, RU, UWC, UW, UZ Costing (Management Accounting) : UCT Criminal Law: UZ

Customary Law : RU Data Processing : US Development Administration : RAU, US Development Economics : UFH Distributive Trade : PU for CHE, US Economic Analysis : UP, UNISA Economic Development and the Economics of Underdeveloped Regions : UDW, UZ Economic Framework of Business : UN Economic Geography : RU Economic History : UCT, UDW, UN, UPE, PU for CHE, RU, UNISA, UW Economic Statistics : UCT, UPE Fconomics : All the universities Economics of Agriculture : RU (See also Agricultural Economics) Economics of Transport : UN (See also Transport Economics) Economics of Underdeveloped Regions : UN Economics (Public Administration) : UPE Electronic Data Processing : UPE, UWC Elementary Operations Research : UPE Elementary Statistics : UPE Elementary Theory of Finance : UPE Elementary Theory of Finance and Statistics : RU Elements of Accounting : UWC English : UDW, UN, UPE, UP, RU, UNISA, US, UWC. UW. UZ English Practical/Special : UDW, UNorth, UOFS, UP, UNISA, US, UWC, UZ Experimental Psychology : UW Farm Management : UNISA Financial Accounting : US French : UN, UW Geography : UN, UPE, UP, US, UW German, UN, UW, UZ Hebrew : UW History : UN, UP Income Tax : UDW, UNorth, UOFS, UPE, PU for CHE, UP, RAU, UNISA, US, UWC, UW, UZ

Industrial and Organizational Psycho= logy : UPE Industrial and Personnel Psychology : PU for CHE Industrial Law : UPE, PU for CHE, UNISA, 117 Industrial Psychology : UDW, UFH, UNorth, UOFS, RAU, UNISA, US, UWC, UW, UZ Industrial Sociology : UOFS, PU for CHE, UW Informatics : UP Information Systems : UNISA Insolvency : UCT Insurance : UCT, PU for CHE International Economic Relationships and Organisations : UN International Politics : UNorth, UP Interpretation of Statutes : UOFS, UP Introduction to Computing : UCT Introduction to Legal Science and History of Law : UPE Introduction to Management Accounting : UCT Introduction to South African Law : UN Introduction to Systems & Electronic Data Processing : UCT Italian : UW Juridical Interpretation : UFH Labour Law : UOFS, UP Language and Communication : UN Latin : UN, UNorth, UOFS, RU, UNISA, US, UWC, UW Law of Obligations : UZ Law of Taxation : UN Law of Things : UZ Legal Theory : RU Local Government Accounting : UNISA Logic and Methodology : UDW Macro-economics : UPE Management Accounting : UDW, UN Management Information Systems : UZ Managerial Accounting and Finance : UN Marketing : UCT, UN, UP, UW Mathematical Economics : UCT, PU for CHE Mathematical Methods : UNorth Mathematical Methods for Economics : UDW Mathematical Statistics : UOFS, UPE, UP, RAU, RU, US, UW

Mathematics : UCT, UN, UNorth, UOFS, UPE, PU for CHE, UP, RAU, RU, UNISA, US, UW Mathematics and Statistics : RU, UW Mathematics for Economists : UPE Mathematics for Economists and Theory of Finance : UPE Mercantile Law : UOFS, UPE, PU for CHE, RU, UWC Money and Banking : UOFS, PU for CHE Municipal Administration : UOFS Municipal Law and Administration : UDW Nederlands : UDW Northern Sotho : UNISA Numerical Analysis and Computation : UCT **Operations Research** : UCT Personnel Management : UCT, UP Philosophy : UCT, UN, UP, UW Political Economy of Southern Africa : UN Political Science : UCT, UDW, UFH, UN, UNorth, UOFS, UP, RAU, US, UWC, UW, UZ Population and Labour : UN Portuguese : UW Private Law : UDW, UNorth, UOFS, UPE, UNISA, US, UWC Professional Afrikaans : UPE Professional Communication : UCT Property Economics : UW Public Accountancy : RAU Public Administration : UDW, UFH, UN, UNorth, UPE, UP, US, UWC, UZ Public International Law : UP Public Sector Accounting : UN Retailing : UNorth Retail Management : UFH Roman-Dutch Law : UCT, UP Roman Law : UDW, UN, UNorth, UPE, UNISA, US, UWC Roman Law and History of Law : UOFS Roman Law and Jurisprudence : UCT Russian : UW Sake-Afrikaans : UCT Shorthand and Typewriting : US, UWC Social and Economic Legislation : UFH Social Anthropology : UN

Sociology : UDW, UN, UPE, RAU, US, UWC, Taxation : UN UW, UZ Taxation and Estate Duty : UCT Sotho : UP Theory of Finance : UPE, US Southern Sotho : UOFS, UW Transport Administration and Management : Special Accounts : US RAU State Administration : UOFS Transport Economics : UOFS, RAU, UNISA, US Statistical Methods : UNorth, UPE, RAU, Tsonga : UNISA US Tswana : UNISA Statistics : UCT, UCW, UFH, UN, UOFS, PU for CHE, UP, UNISA, US, UWC, UZ Venda : UNISA Statistics for Scientists : US Xhosa : UPE, UNISA, UWC Systematic Philosophy : UZ Zulu : UN, UOFS, UNISA, UW, UZ Systems and Electronic Data Processing : UCT

APPENDIX VII

MAJOR SUBJECTS FOR B.SC. OFFERED IN THE FACULTY OF SCIENCE

Anatomy : UW Applied Chemistry : UN, RU Applied Chemistry (Geol.) : RU Applied Computer Science : UFH Applied Mathematics : All the uni= versities Applied Physics : UN Applied Psychology : UW Archaeology : UW Astronomy : UNISA Biochemistry : UCT, UDW, UFH, UN, UOFS UPE, PU for CHE, UP, RAU, US, UWC, UW, UZ Biological Science : UN Botany : All the universities except RU Business Data Processing : UN Chemistry : All the universities Chemistry (Biol.) : RU Computer Science : UCT, UDW, UN, UNorth, UOFS, UPE, PU for CHE, UP, RAU, RU, UNISA, US, UW Counselling Psychology : UOFS Dietetics : US Ecology : UZ Economics : UN Entomology : UN, UOFS, UP, RU, US Experimental Psychology : UW General Anatomy : UW Genetics : UN, UOFS, UP, US, UW

Geochemistry : UCT, UOFS, US Geography : All the universities except UPE and US Geohydrology : UOFS Geology : All the universities Geophysics : UW Histology : UW Industrial and Personnel Psychology : PU for CHE Industrial Chemistry : PU for CHE Industrial Psychology : UW Information Systems : UNISA Mathematical Methods : UNorth Mathematical Statistics :UDW, UFH, UN, UNorth, UOFS, UPE, UP, RAU, RU, US, UWC, UW, UZ Mathematics : All the universities Metallurgy : UP Micro-Anatomy : UW Microbiology : UCT, UDW, UOFS, PU for CHE, RU, UNISĂ, US, UW Microbiology - Plant Pathology : UN Operations Research : UPE, UNISA Pedology : PU for CHE Physical Education : UNorth, UOFS, PU for CHE, US Physical Geography : UPE Physics : All the universities Physiological Chemistry : UNISA, UW Physiology : UDW, UNorth, UOFS, PU for CHE, UNISA, US, UWC

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Physiology (Dental) : UW Physiology (Medical) : UW Physiology (Science) : UW Plant Pathology : US Plant Science : RU Polymer Science : UPE Psychology : UDW, UFH, UN, UNorth, UOFS, PU for CHE, RAU, RU, UNISA, US Soil Science : UN Statistical Methods : UPE, RAU Statistics : UCT, UFH, UN, UOFS, UNISA, US Theoretical Chemistry : UN Theoretical Physics : RAU, UW Theory of Statistics : PU for CHE Zoology : All the universities

APPENDIX VIII

USEFUL ADDRESSES

1. UNIVERSITIES IN THE R.S A.

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 X1314 ALICE, CAPE PROVINCE 5700

The Registrar Medunsa P.O. MEDUNSA 0204

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, TRANSVAAL 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 The Registrar University of the Witwatersrand University of Stellenbosch STELLENBOSCH, CAPE PROVINCE Jan Smuts Avenue JOHANNESBURG, TRANSVAAL 7600 2001 The Registrar University of the Western Cape Private Bag X17 The Registrar University of Zululand KWA-DLANGEZWA, NATAL BELLVILLE, CAPE PROVINCE 3886 7530 2. GOVERNMENT DEPARTMENTS CONCERNED Enquiries should be addressed to the Secretary Department of Foreign Affairs Information Service of South Africa Union Buildings Private Bag X152 PRETORIA PRETORIA 0002 0001 Department of Immigration Department of Coloured, Rehoboth and P.O. Box 2072 Nama Relations PRETORIA Private Bag X9058 0001 CAPE TOWN 80000 Department of Indian Affairs Department of Co-operation and Private Bag X92 Development PRETORIA P.0. Box 384 PRETORIA 0001 0001 Department of Education and Training Department of National Education Private Bag X122 Private Bag X212 PRETORIA PRETORIA 0001 0001 3. GENERAL The Secretary The President Joint Matriculation Board Human Sciences Research Council P.O. Box 3854 Private Bag X41 PRETORIA PRETORIA 0001 0001 The Registrar The Secretary South African Medical and Dental Council Council for Scientific and Industrial P.O. Box 205 Research PRETORIA P.O. Box 395 PRETORIA 0001 0001

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