Careers in the Health Sector

Learner Guide

2013
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1. ACRONYMS

HIGHER EDUCATION INSTITUTIONS

UJ - University of Johannesburg
UP - University of Pretoria
WITS - University of the Witwatersrand
UCT - University of Cape Town
UL - University of Limpopo (Medunsa Campus)
TUT - Tshwane University of Technology
UNISA - University of South Africa
DUT - Durban University/Institute of Technology
NWU - North West University
UKZN - University of Kwa-Zulu Natal
UWC - University of Western
UFH - University of Fort Hare
UFS - University of Free State
UNIV - University of Venda
UN - University of Limpopo (Turfloop Campus)
VUT - Vaal University of Technology
NMMU - Nelson Mandela Metropolitan University
CPUT - Cape Peninsula University of Technology
CUT - Central University of Technology, Bloemfontein
UNIZU - University of Zululand
WSU - Walter Sisulu University
US - University of Stellenbosch
LCEC - Lebone College of Emergency Care
ALNC - Ann Latsky Nursing College
SG LNC - S.G. Lourens Nursing College
CHBNC - Chris Hani Baragwaneth Nursing College
GNC - Ga-Rankuwa Nursing College
BLNCC - Bona Lesedi Nursing College Campus (CHBNC)
RMNCC - Rahima Moosa Nursing College Campus (ALNC)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>GDOH</td>
<td>Gauteng Department of Health</td>
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<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
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<td>SASP</td>
<td>South African Society for Physiotherapy</td>
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<tr>
<td>OT</td>
<td>Occupational Therapist</td>
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<tr>
<td>OTA</td>
<td>Occupational Therapist Assistant</td>
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<tr>
<td>PT</td>
<td>Physiotherapist</td>
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<tr>
<td>CT</td>
<td>Clinical Technologist</td>
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<td>ST</td>
<td>Speech Therapist</td>
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<tr>
<td>MP</td>
<td>Medical Physicist</td>
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<tr>
<td>ECP</td>
<td>Emergency Care Practitioner</td>
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<td>LCEC</td>
<td>Lebone College of Emergency Care</td>
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<td>HRD</td>
<td>Human Resource Development</td>
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<tr>
<td>EWP</td>
<td>Employee Wellness Program</td>
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<td>LMSD</td>
<td>Leadership, Management and Skills Development</td>
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<td>SBAH</td>
<td>Steve Biko Academic Hospital</td>
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<td>CMJAH</td>
<td>Charlotte Maxeke Johannesburg Academic Hospital</td>
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<td>CHBH</td>
<td>Chris Hani Baragwaneth Academic Hospital</td>
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<td>DGMAH</td>
<td>Dr. George Mukhari Academic Hospital</td>
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<td>HPCSA</td>
<td>Health Professions Council of South Africa Dental Assistance</td>
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<td>DA</td>
<td>Dental Assistance</td>
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<td>NSC</td>
<td>National Senior Certificate</td>
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<td>MOP's</td>
<td>Medical Orthotic and Prosthesis</td>
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<td>HPCSA</td>
<td>Health Profession Council of South Africa</td>
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<td>APS</td>
<td>Admission Point Score</td>
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<tr>
<td>EDL</td>
<td>Essential Drug List</td>
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<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
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<td>NGO</td>
<td>Non Governmental Organisation</td>
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3. Foreword:

According to the World Health Organisation (WHO), 57 countries, most of them in Africa faces severe health workforce shortages. WHO estimates that 4,250,000 health workers are needed to fill this gap. Thus following a career in health, one is almost assured of a job on completion. (WHO 2010)

Careers in health are very exciting, interesting and perhaps the most emotionally rewarding as one provides a service to humanity. However to be successful as a health worker one needs to be compassionate and be motivated by a higher calling to the service of mankind and love of a country; be astute with meticulous attention to detail and love of learning. In health, learning does not end with a qualification but continues throughout life. Deserving health workers are respected by their communities and enjoy high social standing in South Africa, they are also sought after internationally.

This is a clarion call for young South Africans to consider careers in health to contribute to the transformation agenda of our young democracy - health for a better life. With this booklet we hope to assist young people to identify their specific niche in the health sector and make appropriate career choices.

This booklet is targeted at the Youth of Gauteng Province: The Gauteng Department of Health and Social Development (GDH & SD) has identified the need to inform the learners of different career options available in the Health and Social Sector. This is to enable them to make more informed career decisions which will impact positively on the future employment opportunities of our Youth.

Myths about Health field of study

- Admission in Health Sciences field needs only Mathematics and Physics learners.
- One will become sick if working in the health services.

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4. ACKNOWLEDGEMENTS

The HRD & EHWP Chief Directorate recognises and acknowledges the contributions of all the different subject experts consulted which added value.

PLEASE NOTE

1) Participation in this project was voluntary – no payment is due to any person who assisted in the production of this booklet.

2) The content of the booklet is for educational purposes only; no reproduction for any personal gains will be permitted.

3) The Gauteng Department of Health has no direct interaction with Higher Education Institutions and does no direct marketing nor promotion for any of the institutions in this booklet.
5. Medicine

This is a six year Bachelor of Medicine and Surgery degree at a University (MBChB).

A Medical doctor is a highly trained health professional responsible for the health care and medical needs of patients. They are responsible for the physical and mental well being of the patients.

The course duration is five to six years, depending on the university’s course structure plus two years medical internship.

Subjects Required:
Mathematics, Physical Science, Life Sciences and English

Where Can You Study MBChB?
One of the following universities: UP, Wits, UCT, UL, US, UKZN, UFS and WSU

Employment Opportunities:
Public Hospitals and Clinics
Department of Health
Private practice and hospitals
Industry and Research
Academic – training institutions
NGO and international organisation e.g. WHO
Statutory and Professional bodies
6. Clinical Associates (CA)

Clinical Associates programme is a three year bachelor’s degree, the Bachelor of Clinical Medical Practice (B.CMP).

A Clinical Associate is a healthcare professional who is trained to practice medicine under the supervision of a medical doctor. They are concerned with preventing and treating human illness and injury by providing a broad range of health care services that are traditionally performed by a medical doctor. They are qualified to conduct physical exams, diagnose and treat illnesses, order and interpret tests, prescribe medications, counsel on preventive health care and may assist in surgery under the supervision of a medical doctor.

Work Opportunities

- Public Health – District Hospitals, CPHC Facilities and Clinics

Where can one study for CA?

- WSU, UP, Wits

School Subjects

Mathematics, Physical Science and Life Sciences
10

7. Emergency Care Technician (ECT)

This is a two year course leading to Emergency Care Technician (ECT) qualification. Students are equipped to become competent in providing pre-hospital emergency care to the critically ill or injured patient. They receive training in basic, intermediate and advanced techniques to render advanced life support. Students who pass this course are eligible to apply to the HPCSA to be registered in the category of Emergency Care Technician (ECT).

School Subjects
- Mathematics
- Biology
- Physical Science

NB. Every college has its own admission requirements.

Where Can One Study to be an ECT?

Lebone College of Emergency Care
North West College of Emergency Care
Kwa Zulu Natal College of Emergency Care
South African Defence Force
Cape Peninsula University of Technology
8. EMERGENCY CARE PRACTITIONER (ECP)

A three year diploma plus a B.Tech leads to Emergency Care Practitioner (ECP) Qualification.

Emergency care practitioners are commonly known as Paramedics. Paramedics treat a wide variety of patients in advanced life support systems in the pre-hospital settings. In essence they bring the emergency care services to the patient anywhere.

School Subjects:

Mathematics, Physical Science and Life Sciences.

The other option is to enter the program after completing an Emergency Care Technician (ECT) – a two year program done at

Employment Opportunities:

- Public Health – Hospitals and Clinics and response centres
- National and Provincial Departments as well as Local government
- Private – practice and hospitals
- Industry and Research
- Academic – training institutions
- SANDF

Government colleges and SANDF.
9. Nursing Education

This is a four year diploma in nursing course plus a compulsory one year community services. There is a contractual obligation – a year for each year for each year of study (4 year binding). Community services duration is included in those four years.

After completion of the four year basic nursing course an opportunity exists for qualified nurses to further their education in various speciality areas e.g. nursing education, nursing management, critical care nursing, trauma and emergency nursing, operating theatre nursing, primary health care, orthopaedic nursing and child nursing etc.

Employment Opportunities

Various public hospitals, clinics, community and SANDF/other departments
- Private nursing practice or working in a private hospital.
- Universities, Nursing Colleges and research institutions
- Occupational Health and Mines/Industry

Where Can One Study For Department of Health Nursing Program?

Ann Latsky Nursing College
Chris Hani Baragwaneth Nursing College
Ga-Rankuwa Nursing College
S.G. Lourens Nursing College

How can you apply for the course?

You may contact the Gauteng Central Selection Centre at 011 644 8946 or the Nursing Education Sub-Directorate at 011 298 2409 to obtain information on the process to follow.

Application forms, for learners in grade 12, are available from the three Nursing Colleges between the beginning of March and the end of April each year.

Application Requirements:

Grade 12 learners must use their Grade 11 results to calculate the Admission Point Score (APS). Acceptance into the selection process is provisional and the final acceptance is dependent on meeting the APS in the final grade 12 results.
10. Nursing Sciences

Bachelor of Nursing/ B. Cur is a four year degree. Students must register with the South African Nursing Council as student nurses for the duration of the program.

Specialties In Nursing Sciences

The person can specialize in any of the following fields: General medical and surgical nursing science; Trauma nursing, Theatre nursing, Community nursing, Psychiatric nursing, Midwifery nursing, Paediatric nursing, Neonatal nursing, Nursing management Obstetric Nursing, Primary Health Care Nursing, Critical care Nursing, Oncology Nursing, Ophthalmic Nursing and Nursing education.

Employment Opportunities

Various public hospitals, clinics, community and SANDF/other departments
Private nursing practice or working in a private hospital.
Universities, Nursing Colleges and research Institutions
Occupational Health and Mines/Industry

Where Can One Study For a Bachelor of Nursing Degree?

UJ, UP, Wits, UCT, UNISA, DUT, NWU, UKZN, UWC, UFH, NMMU, WSU, CPUT etc

School Subjects

English, Mathematics, Physical Science, Life sciences – please note that different Universities have their specific admission requirements.
11. Oral Health Care

**DENTISTRY**

This is a five year BDS or BChD degree. The dentists provide services aimed at the diagnosis, prevention and treatment of numerous dental problems and diseases of teeth and gums.

They examine teeth and the tissues of the mouth to diagnose diseases or abnormalities; supply patients with information concerning the control of tooth decay, the maintenance of oral hygiene and the removal of plaque; take X-rays of the oral structure; cleans teeth, fills cavities, treats abscesses and infections of the gums and extracts teeth. The work also entails creating impressions of the mouth to make false teeth, crowns and bridges; and does surgical procedures to remove teeth and to treat jaw fractures.

**WORK OPPORTUNITIES**

- Private practice
- Hospitals
- Municipal clinics
- Industries
- Universities
- Research Institutions

**SCHOOL SUBJECTS:**

Each institution will have its own minimum entry requirements.

Compulsory Subjects: Mathematics, Physical Sciences
Recommended Subjects: Life Sciences

**DENTAL ASSISTANT (DA)**

National Certificate: Dental Assisting, done at three institutions in SA. It is One year full-time, or two years part-time. The dental assistant is responsible for preparing the surgery and patient for the dentist and assists the dentist in all the dental disciplines. Other responsibilities include infection control in the dental practice, keeping record of patients, mixing and preparing dental materials, oral hygiene instruction to patients, develops and mounts X-rays, deals with appointments, stock control and accounts also.

**WHERE CAN ONE STUDY?**

TUT, DUT and CPUT

**SCHOOL SUBJECTS**

Life Sciences or Physiology, Mathematics or Science
12. ORAL HYGIENE (OH)

This is a two year full time Diploma or three-year degree at University. The oral hygienist is concerned with the promotion of oral health and prevention of dental disease.

Dental hygienists remove stains and tartar from teeth and polish them. They apply decay-preventing agents to teeth, insert temporary fillings and take impressions and castings of study models. They give patients information about good home dental care and healthy nutritional practices. They perform diagnostic tests for interpretation by the dentist, such as intra-oral and extra-oral X-rays. They assist dentists during dental operations.

EMPLOYMENT OPPORTUNITIES:
- Private dental practices
- Hospitals
- Clinics
- State health departments
- Universities

WHERE CAN ONE STUDY FOR OH?

Degree: Wits, UL
Diploma: Wits, UP, UWC

SCHOOL SUBJECTS

National Senior Certificate meeting degree requirements for a degree course
National Senior Certificate meeting diploma requirements for a diploma course
Each institution will have its own minimum entry requirements.

Compulsory Subjects: None
Recommended Subjects: Mathematics, Life Sciences, Physical Sciences
13. DENTAL TECHNOLOGY (DT)

Three years of training for the National Diploma in Dental Technology, the professional is called a Dental Technician.

Dental technicians are skilled craftsmen who make and repair dental restorations such as dentures, bridges, crowns, fillings, braces and other orthodontic correction appliances. They follow the directions or prescriptions of a dentist and do not deal with patients themselves.

WORK OPPORTUNITIES:

- private and commercial dental laboratories
- dentists
- hospitals and clinics
- government departments
- manufacturers of dental laboratory equipment and materials
- self-employment, with enough experience and capital, can set up own practice

WHERE CAN YOU STUDY FOR DENTAL TECHNOLOGY?

CPUT, DUT and TUT

SCHOOL SUBJECTS

Compulsory Subjects: Mathematics, Physical Sciences
Recommended Subjects: Life Sciences

SCHOOL SUBJECTS

Compulsory Subjects: Mathematics, Physical Sciences
Recommended Subjects: Life Sciences

DENTAL THERAPIST

A three year diploma in Dental Therapy or Degree: BDental Therapy

The dental therapist provides basic dental services and preventative dentistry carries out dental examinations; identifying and diagnosing serious conditions and referring these to dentists and orthodontists. Where necessary they do simple fillings and extractions and will carry out preventative measures against the more common oral diseases.

They also clean, scale, floss and polish patients' teeth, while educating them about oral health and hygiene. They will take X-rays and should more intricate dental work or complicated bridgework be required, they will refer patients to qualified practitioners.
WORK OPPORTUNITIES

Public hospitals
Public clinics
Private dental clinics
Self-employment

WHERE CAN YOU STUDY FOR DENTAL THERAPIST?

UKZN and UL; Degree at UL, Wits

SCHOOL SUBJECTS

Compulsory Subjects: Mathematics, Physical Sciences
Recommended Subjects: Life Scienc
14. Dietetics & Human Nutrition

Four year degree, B.Sc. (Dietetics) at a University plus 34 weeks internship training at an accredited Health institution. The first two years focus on relevant Science course and the last two focuses on professional training where practical's training in health services are undertaken.

Dietician applies the science of nutrition for the purpose of promoting health and development of individuals, groups or communities. They play an important role in the maintenance and improvement of the health of the people/patients through promotion of healthy eating and diet modification to achieve good nutrition/dietary intake. Their work requires good knowledge of food, nutrients, eating habits and their relationship to diseases as well as normal body functioning.

Dieticians, also known as nutritionists, apply the science of human nutrition to influence the eating behaviour of individuals, groups and communities, and select food to promote and maintain health and to prevent and treat illness and disease. Nutritionists are usually limited to advising the general public about correct eating habits for health. Dieticians use their skills and knowledge to modify diets in order to treat medical conditions.

Employment Opportunities

- Hospitals, nursing homes, clinics and other health care facilities
- Educational institutions
- Industrial concerns
- Government departments
- Nutrition research laboratories / units
- Medical research councils
- Food industry
- Hotels
- Self-employed (consultant in private practice)
Where Can One Study For Dietetics?

UWC, UCT, US, UKZN, Wits, UL, UP, UFS and UV

School Subjects

Mathematics, Physical Science and Life Sciences
Physiotherapy is an applied discipline dedicated to the study of human movement and function and how it relates to health and well-being. It is aimed at optimising quality of life in both individuals and communities. It also involves the skilled use of physiologically-based movement techniques, supplemented when necessary by massage, electrotherapy and other physical means, for the prevention and treatment of injury and disease. Within the healthcare team, Physiotherapy plays a role in the promotion of a healthy lifestyle, the prevention of illness and injury for those at risk, as well as the rehabilitation and restoration of an individual's function following injury or impairment of function (disability).

Employment Opportunities:
- Provincial hospitals
- Department of Health
- Rehabilitation centres for the physically handicapped
- Special schools e.g. schools for the cerebral palsied
- Mining companies
- Homes for the aged
- Sports and recreation clubs
- Universities
- Private hospitals
- Private practice
- Self-employment, in private practice or in partnership

Where Can One Study For Physiotherapy?
UWC, UCT, US, UKZN, Wits, UL, UP, UFS and UV

School Subjects
Mathematics, Physical Science and; Life Sciences is recommended
Speech and language therapists and audiologists help babies, children and adults to overcome or reduce their communication disorders.

Speech language therapy: This entails the assessment and remediation of speech disorders e.g. articulation problems, stuttering, cleft lip and palate, delayed language development and problems after a stroke.

Audiology: This entails the diagnoses of hearing problems, fitting of hearing aids and therapy for patients with impaired hearing. Therapy is aimed at improving language, speech and lip-reading abilities as well as listening disabilities and also the treatment of persons with cochlear implants - see Audiologist.

Depending on the cause of the disorder, speech-language therapists and audiologists may work individually or as a team with one or more of the following: medical doctors or specialists, psychologists, physiotherapists, social workers, educationalists and occupational therapists. Once the problem has been identified, an individual programme is worked out and in many cases the involvement of the family of the patient is included in the therapy.

Employment Opportunities:
- Department of Education
- University speech and hearing clinics
- Special schools
- Audiology departments in hospitals and clinics
- Medical practitioners
- Industries
- Defence force
- Universities
- Self-employment, with private practice.

Where Can You Study?
UP, Wits, US, UCT, UKZN and UWC

School Subjects:
National Senior Certificate meeting degree requirements for a degree course National Senior Certificate meeting diploma requirements for a diploma course.

Each institution will have its own minimum entry requirements.

Compulsory Subjects: None

Recommended Subjects: Mathematics, Life Sciences, Physical Sciences
**17 Podiatry**

**This is a four year B. tech qualification at only one University in Africa.**

Podiatry is the health Profession involved with the care and management of feet problems. Podiatrists are concerned with the examination, diagnoses, prevention and treatment of foot disorders by medical, mechanical and surgical and other means. A podiatrist deals with podiatric medicine, and can perform treatments and minor surgeries on the foot and ankle.

**Employment Opportunities**

Podiatrists are scarce in South Africa; they work in the following areas:

- Public Health Sector
- Private Sector
- Commercial sector – Insurance companies
- Industry - big shoe brand companies employ podiatrists
- Academia - teaching of prospective students and research

**Where Can One Study?**

UJ

**Subjects:**

Mathematics or Mathematical Literacy.
18 Medical Orthotics and Prosthesis

This is a three National Diploma: Medical Orthotics and Prosthetics which serves as the basic to practice in South Africa.
The B Tech: Medical Orthotics and Prosthetics together with future master’s and doctoral degrees will provide the candidates with ample opportunity for research and development.

An Orthotics and Prosthetics is a specialist in the field of Orthopaedic Rehabilitation where they assess, measure, design, manufacture, maintain and fit all orthotic and prostheses to patients.

A Medical Orthotist and Prosthetist works directly with patients in the specialised field of Orthopaedic Rehabilitation together with other members of the multidisciplinary team by assessing, measuring, designing, manufacturing, maintaining and fitting orthotic and prostheses to assist with the rehabilitation of physically impaired patients.

Employment Opportunities

Private practices Orthotic and Prosthetic centres in government
Corporate companies in Orthopaedic Rehabilitation
International companies in Orthopaedic Rehabilitation
Educational institutions

Where Can One Study?

TUT

School Subjects

A senior certificate with a pass in Mathematics/Physical Science and/ Life Sciences - D in higher grade.
19 Occupational Therapy

It is a four year degree; Bachelor of OT or Bachelor of sciences OT. It is the study of how to remediate occupational performance that is disturbed or disrupted in some way. It is a health care occupation in which people with physical or mental diseases or disabilities are treated by means of participation in everyday activities.

The Occupational Therapist is trained to apply specific techniques and procedures in a scientific manner, so that a client's remaining abilities are developed maximally, thus enabling the client to lead a meaningful and independent life. Occupational therapy is also applied to persons with developmental delays, learning disabilities or psychosocial dysfunctions.

Employment Opportunities:

- Provincial (state) Hospitals and Clinics
- Community Based Organisations
- Private hospitals
- Private practice
- Mines
- Schools for children with learning problems, physical and psychological impairments
- Homes for the aged.
- Rehabilitation centres for physical, substance abusers and psychiatric care.
- Private practice e.g. Mines, mine hospitals
- Commercial institutions, such as insurance companies.
- Higher education institution and Research Companies

Where can one study to become an OT?

- UWC, US, UKZN, UFS, UoL, UCT, Wits, UP
Social Work

Social work is a profession that involves helping individuals from every walk of life. Social workers are professional, qualified people who strive for the general well-being of the people they serve. Their task is to analyze the deep-rooted causes of social problems, such as poverty, unemployment, illness, antisocial behaviour, and other social inadequacies, and to help those concerned to overcome them. Specialized knowledge and an understanding of people is therefore essential in the job.

Their services are aimed at the individual, group, family, organization, or community context and their environment, as well as at the interaction between people and their environment. Their goal is to help improve people’s behaviour or circumstances to enable them to once again play a meaningful role within their families, communities, and society.

Employment Opportunities

Government departments and provincial and local administrations
SA National Council for Child and Family Welfare
National Council for the Care of Physically Disabled Persons in SA
SA Family and Marriage Society (FAMSA)
Provincial hospitals
The Christian Social Councils of the Dutch Reformed Church SA

National Council for Alcoholism and Drug Dependency
Schools

Where Can One Study?

UP, US, UWC, NWU, NMMU, UL, UZ, UJ, UNISA, UCT, UFS, RU, UKZN, Wits

School Subjects:

Compulsory Subjects: None
Recommended Subjects: None
Clinical Psychology training consists of 5 years of academic training at a university, with an internship of 12 months at an accredited institution. Firstly, Bachelor’s degree must be obtained with psychology as a major subject. The basic minimum qualification for registration as a psychologist is a Masters degree in Clinical Psychology.

Counselling Psychology training follows the same route of clinical psychologist but the basic minimum qualification for registration as a psychologist is a Master’s degree in Counselling Psychology.

Psychologists see clients for psychological assessment, psychotherapy and counselling. They work with a broad range of people including individuals, couples, families, and employees in the workplace and business organizations.

Psychologists gather information about people’s interests, abilities and behaviour using psychological tests and other methods in order to understand, explain and predict human actions. In doing so, they seek to identify the source of problems and to determine treatment.

Psychologists may help individuals to deal with the problems of daily living, provide psychotherapy or conduct behaviour modification programmes in mental clinics and hospitals. They study human behaviour in terms of the environment or individual development.

Employment Opportunities

universities and colleges
education departments as educational psychologists
government departments and SANDF
business and industries, as industrial psychologists
HSRC and CSIR
consulting agencies
private, public and psychiatric hospitals
community and rehabilitation clinics
and other health care facilities
churches
correctional institutions
self-employment, in private practice

**School Subject:**

National Senior Certificate meeting degree requirements for a degree course
Each institution will have its own minimum entry requirements.
Compulsory Subjects: Dependant on institution. (Mathematics is a pre-requisite at some institutions)
Recommended Subjects: Mathematics, Life Sciences

**Where can one study to become a Psychologist?**

UJ, NWU, UCT, UNISA, UJ, UFH, US, UFS, UP, UZ, UWC, UV, UKZN,

**School Subjects**

Mathematics, Physical Sciences & Life Science
The optometrists specifically deal human vision and aim to give patients clear and normal eyesight. They measure the efficiency of their patient's eyes and where necessary, take steps to improve or prevent deterioration of vision. They examine eyes for vision problems, disease and other abnormal conditions and test for proper depth and colour perception and the ability to focus and coordinate the eyes.

They specialize in visual defects of the physiological healthy eye. They are able to prescribe spectacles or contact lenses to rectify or alleviate visual defects such as far-sightedness, short-sightedness, astigmatism (image distortion) and presbyopia (far-sightedness as the result of age).

Work Opportunities:

Public Health Institutions like Hospitals and Clinics
Private institutions for example practice practitioner or hospitals
Special Schools for Physical or visual Impaired
Industry and Research
Academic – training institutions
Department of Defence and Department of transport

Subjects:
Mathematics, Physical Science and Life Sciences

Where can one study Optometry?
Optometry, UJ, UKZN and UFS
Pharmacy is a four year Degree (BPharm) plus one year internship. Pharmacists form the link between pharmaceutical manufacturers and medical doctors, between doctors and patients, and between patients and their communities. Their role in the health team is to manufacture, prepare and supply suitable and safe medicinal products for the prevention or cure of illness in people. The nature of pharmacists’ work varies depending on their field of employment e.g. Community pharmacies, Hospital pharmacies, Wholesaler pharmacies and the manufacturing industry.

Employment Opportunities For Pharmacists

- Public Hospitals, Clinics
- Private Sector
- Private Hospitals
- Research companies
- Higher Education Institutions
- Clinical trials
- Medicine control council
- NGOs

HERE CAN YOU STUDY PHARMACY?

NMMU, NWU, UKZN, UWC, Wits and RU; UL and TUT jointly offer BPharm

SCHOOL SUBJECTS

Mathematics, Physical Science
Recommended Subjects: Geography
Radiographers take X-rays and apply radioactive substances or ultrasound to patients for diagnostic and therapeutic purposes. They work at the request of a dentist or a qualified doctor or specialist, such as a radiologist. Radiographers are responsible for using complex and expensive equipment for the well-being of patients during their investigation or treatment.

There are four disciplines of Radiography: Diagnostic radiography; Therapeutic radiography; Nuclear medicine; and Ultrasound.

Work Opportunities

Hospitals and clinics (private as well as government controlled)
- The Department of Health
- The Chamber of Mines
- South African Defence Force
- Municipalities
- Santa
- Private radiological practices
- Universities and universities of technology
- Self-employment, after registration can go into private practice or partnership

Where Can One Study For Radiography?

UJ, UL, UP, TUT, DUT, NMMU, CPUT, CUT and UKZN

School Subjects

Each institution will have its own minimum entry requirements.

Compulsory Subjects: Mathematics, Physical Sciences
Recommended Subjects: Life Sciences
25 Clinical Engineering

This is a four year National Diploma: Engineering: Electrical Clinical Engineering (NDEEN - CEN)

A Clinical Engineer is professional who supports and advances patient care by applying engineering and managerial skills to healthcare technology.

Clinical Engineering involves the repair of medical equipment, calibration and quality assurance testing of machines used in hospitals and by doctors. They are skilful and knowledgeable in repairing, developing and managing maintenance systems for medical equipment and medical technology used in theatres, ICU and specialised units. Available specialities are diagnostic, imaging, radiation equipment.

This is currently on of the critical skill we needed in South African health sector.

Employment Opportunities:

Public institution e.g. government hospital
Private hospitals
Industry and private companies that sell medical equipment.

Where Can One Study?

TUT and UNISA.

School Subjects

Mathematics and Physical Sciences,
26 Clinical Technology

Clinical technology is a three year national diploma. Clinical Technologists are concerned with the entire human body and the functioning of its organs. They use specialized procedures and sophisticated apparatus to diagnose and help with corrective treatment for patients. They usually work with the doctor or specialist concerned and sometimes as members of a medical team.

Employment Opportunities:

- clinical departments of academic and private hospitals
- with doctors / specialists in private practices
- private laboratories
- self-employment

Where Can You Study?

DUT, TUT and CUT

School Subjects

Compulsory Subjects: Mathematics, a science subject
Recommended Subjects: Life Sciences, Physical Sciences
Medical Physicist is a post-graduate qualification. One has to acquire B.Med.Sc (Radiation Science) degree then B.Med.Sc. Hons (Medical Physics) to qualify as Medical Physicist. Upon completion of Honours degree one has to register with HPCSA to be able to practice as Medical Physicist.

Work Opportunities

Department of Health
Public hospitals
Private hospitals
The Atomic Energy Corporation
ESCOM
The Foundation for Research Development
Private sector
Private practice

Where Can They Study?
Wits, UCT, UP, UFS and UL

School Subjects
Mathematics
Life Sciences
Physical Science
A three year diploma

The National Diploma: Environmental Health is the study of health and related risks that people could be exposed to in various environments. Upon successful completion of the diploma, followed by one year of compulsory community service students can register as Environmental Health Practitioners (EHPs) with the Professional Board for Environmental Health of the Health Professions Council of SA (HPCSA).

Environmental Health Practitioners deal with elements of safety, health and the suitability of various environments. These include, among others, industrial / housing developments waste management, water services, pest control, food and transport safety, tourism and leisure, pollution control as well as general research and development elements. EHPs identify, evaluate, control and where necessary research the possible sources of health risks in the environment.
Work Opportunities

Provincial and National
Department of Health
Department of Labour
Department of Water and
Environmental Affairs
Department of Travel and
Tourism
Local municipalities
Industrial/housing developments
and Mining
Food processing plants
The private sector.

Where Can They Study?

Cape Peninsula University of Technology (CPUT)
Mangosuthu University of Technology (MUT)
Durban University of Technology (DUT)
Central University of Technology (CUT)
Nelson Mandela Metropolitan University (NMNU)
University of Johannesburg (UJ)
Wits, UCT, UP, UFS and UL

School Subjects

Mathematics or Maths Literacy,
Life Sciences and Physical Science
The Gauteng Department of Health provides Bursary opportunities for Youth who are considering a career in the Health care sector.

**WHO IS ELIGIBLE TO APPLY?**

1. Students who wish to pursue health studies in the following fields:
   - Bachelor of Medicine and Surgery
   - Bsc Pharmacy
   - Diploma in Oral Hygiene
   - Diploma in Dental Therapy
   - Diploma in Dental Technology
   - Diploma in Radiography
   - Bsc/BA Speech-Language Therapy and Audiology
   - B.Tech in Medical Orthotics & Prosthetics
   - B.Tech in Podiatry
   - B.Tech Optometry
   - Diploma in Environmental Health
   - Bsc in Physiotherapy
   - BA/Bsc in Occupational therapy
   - Diploma in Clinical Technology
   - Diploma/B. Tech Clinical Engineering
   - B.sc/BA Psychology
   - B.sc in Dieticians
   - Honours in Medical Physicists

2. Be South African citizens

3. Be Permanent residents in Gauteng province

4. Study at a recognized University in RSA

5. Have proof that the parents/guardians are economically disadvantaged

6. Be progressing well in their studies

**HOW DO WE RECRUIT?**

**When**

The Department recruits annually - during August/September

**How**

The Department advertises through print media, notices to Universities, internet and intranets.

**Where**

Applications forms are obtainable from 78 Fox Johannesburg – 9th floor or can be downloaded from Gauteng Health website.

**HOW DO I KNOW IF MY BURSARY IS APPROVED?**

All successful applicants are informed in writing by December of each year.
A learnership is a work-based learning programme that integrates theoretical and practical learning leading to a nationally recognized qualification. It is a structured learning; theoretical learning is class room-based at a learning institution. The duration of the Learnership programme depends on the type of qualification pursuing, but the minimum period of twelve months or 120 credits.

During training the learners receive the stipend to enable them to travel to learning institution and to workplace.

Gauteng Department of Health offers the learnerships accredited by Health and Welfare SETA. Examples are Enrolled Nursing, Diagnostic Radiography, Pharmacist Assistant, etc.

WHAT DOES IT MEAN FOR ME IF I GO ON A LEARNERSHIP?

If you are accepted for a Learnership you will have to sign legally binding learnership agreement with the Department of Health and the training provider. On completion you will be expected to serve back the time equivalent to the duration of the learnership programme.

HOW DO WE RECRUIT?

The Department accesses the database of unemployed youth from National Youth Development Agency (NYDA), Department of Labour and Gauteng City Region (GCRA). Therefore interested youth must submit their CV’s to them so that they are entered into their databases.

WHO CAN APPLY FOR A LEARNERSHIP?

Any South African between the age of 18 and 35 years can apply for a Learnership.
Information to compile this booklet received from the following sources:

1) Department of Health – Career booklet, printed in 2010 and previous marketing material e.g. article for Careers Unlimited, 2007

2) All University and University of Technology websites in South Africa with Health Sciences program, accessed in February 2013

3) All relevant statutory and registration bodies websites for Health Professionals such as
   - www.hpcsao.co.za,
   - South African Dental Association,
   - www.physiosa.org.za
   - (SAPS),
   - www.pharmacouncil.co.za;
   - South African Medical Physics Society;

*Cell C and GDOH “Take A Child To Work 2012”*
## 32 FURTHER ENQUIRIES/INFORMATION

<table>
<thead>
<tr>
<th>Program</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forensic Pathology Service</td>
<td>28 Harrison Street</td>
</tr>
<tr>
<td></td>
<td>Johannesburg 2000</td>
</tr>
<tr>
<td></td>
<td>Phone: (011) 689 5591</td>
</tr>
<tr>
<td>Learnership or internship enquiry</td>
<td>Skills Development office</td>
</tr>
<tr>
<td></td>
<td>Tel (011) 355 3329/3423/3385</td>
</tr>
<tr>
<td>Bursaries and Financial assistance</td>
<td>78 fox street 9th floor</td>
</tr>
<tr>
<td></td>
<td>Tel: (011) 298 - 2331</td>
</tr>
<tr>
<td></td>
<td>Fax: (011) 298 – 2333</td>
</tr>
<tr>
<td>Information on Health Sciences</td>
<td>Professional Development</td>
</tr>
<tr>
<td></td>
<td>Tel (011) 298 2458</td>
</tr>
<tr>
<td>Emergency Care Technician</td>
<td>Lebone College of Emergency Care</td>
</tr>
<tr>
<td></td>
<td>43 Beatrix Street, Arcadia, Pretoria (Corner of Beatrix &amp; Belvedere Streets)</td>
</tr>
<tr>
<td></td>
<td>P.O. Box 26876, Gezina, 0031</td>
</tr>
<tr>
<td></td>
<td>Tel: (012) 356- 8000</td>
</tr>
<tr>
<td></td>
<td>Fax: (012) 356- 8077</td>
</tr>
<tr>
<td>All enquiries on this booklet</td>
<td>Human Resource Development</td>
</tr>
<tr>
<td></td>
<td>Knowledge Management</td>
</tr>
<tr>
<td></td>
<td>Tel (011) 3553385</td>
</tr>
<tr>
<td></td>
<td>Fax (011) 355 3021</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:hrdhelphelpdesk@gauteng.gov.za">hrdhelphelpdesk@gauteng.gov.za</a></td>
</tr>
<tr>
<td>For Nursing intake in the Department of Health Nursing Colleges</td>
<td>Chris Hani Baragwanath Nursing College</td>
</tr>
<tr>
<td></td>
<td>Private Bag X 05, Bertsham, 2013</td>
</tr>
<tr>
<td></td>
<td>Tel (011) 983 3000</td>
</tr>
<tr>
<td></td>
<td>Fax (011) 983 3073</td>
</tr>
<tr>
<td></td>
<td>S.G. Lourens Nursing College (Pretoria) Cnr. Soutpansberg Ave and Dr Savage Road</td>
</tr>
<tr>
<td></td>
<td>Private Bag X 755, Pretoria, 0001</td>
</tr>
<tr>
<td></td>
<td>Tel (012) 319 5600</td>
</tr>
<tr>
<td></td>
<td>Fax (012) 319 5699</td>
</tr>
<tr>
<td></td>
<td>Ga-Rankuwa Nursing College</td>
</tr>
<tr>
<td></td>
<td>Private Bag X 830, Pretoria</td>
</tr>
<tr>
<td></td>
<td>Tel (012) 5600877</td>
</tr>
<tr>
<td></td>
<td>Fax (012) 560 0457</td>
</tr>
</tbody>
</table>
# 33 Higher and Further Education Institutions

## South African Universities

<table>
<thead>
<tr>
<th>University</th>
<th>Telephone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Peninsula University of Technology</td>
<td>021 959 6121</td>
<td><a href="http://www.cput.ac.za">www.cput.ac.za</a></td>
</tr>
<tr>
<td>Central University of Technology, Free State</td>
<td>051 507 3911</td>
<td><a href="http://www.cut.ac.za">www.cut.ac.za</a></td>
</tr>
<tr>
<td>Durban University of Technology</td>
<td>031 204 2111</td>
<td><a href="http://www.dut.ac.za">www.dut.ac.za</a></td>
</tr>
<tr>
<td>Mangosuthu Technikon</td>
<td>031 907 7111</td>
<td><a href="http://www.mantec.ac.za">www.mantec.ac.za</a></td>
</tr>
<tr>
<td>Nelson Mandela Metropolitan University</td>
<td>041 504 1111</td>
<td><a href="http://www.nmmu.ac.za">www.nmmu.ac.za</a></td>
</tr>
<tr>
<td>North West University</td>
<td>018 299 1111</td>
<td><a href="http://www.nmu.ac.za">www.nmu.ac.za</a></td>
</tr>
<tr>
<td>Rhodes University</td>
<td>046 603 8111</td>
<td><a href="http://www.ru.ac.za">www.ru.ac.za</a></td>
</tr>
<tr>
<td>Tshwane University of technology</td>
<td>012 382 5911</td>
<td><a href="http://www.tut.ac.za">www.tut.ac.za</a></td>
</tr>
<tr>
<td>University of Cape Town</td>
<td>021 650 2128</td>
<td><a href="http://www.uct.ac.za">www.uct.ac.za</a></td>
</tr>
<tr>
<td>University of Kwa-Zulu Natal</td>
<td>031 260 3414</td>
<td><a href="http://www.ukzn.ac.za">www.ukzn.ac.za</a></td>
</tr>
<tr>
<td>University of Fort Hare</td>
<td>040 602 2011</td>
<td><a href="http://www.ufh.ca.za">www.ufh.ca.za</a></td>
</tr>
<tr>
<td>University of Free State</td>
<td>051 401 9111</td>
<td><a href="http://www.uovs.ac.za">www.uovs.ac.za</a></td>
</tr>
<tr>
<td>University of Johannesburg</td>
<td>011 559 2911</td>
<td><a href="http://www.uj.ac.za">www.uj.ac.za</a></td>
</tr>
<tr>
<td>University of Limpopo</td>
<td>015 268 9111</td>
<td><a href="http://www.ul.ac.za">www.ul.ac.za</a></td>
</tr>
<tr>
<td>University of Pretoria</td>
<td>012 420 3111</td>
<td><a href="http://www.up.ac.za">www.up.ac.za</a></td>
</tr>
<tr>
<td>University of South Africa</td>
<td>086 167 0411</td>
<td><a href="http://www.unisa.ac.za">www.unisa.ac.za</a></td>
</tr>
<tr>
<td>University of Stellenbosch</td>
<td>021 808 9111</td>
<td><a href="http://www.sun.ac.za">www.sun.ac.za</a></td>
</tr>
<tr>
<td>University of Venda</td>
<td>015 962 8000</td>
<td><a href="http://www.univen.ac.za">www.univen.ac.za</a></td>
</tr>
<tr>
<td>University of Western Cape</td>
<td>021 959 3900/2911</td>
<td><a href="http://www.uwc.ac.za">www.uwc.ac.za</a></td>
</tr>
<tr>
<td>University of Witwatersrand</td>
<td>011 717 1000</td>
<td><a href="http://www.wits.ac.za">www.wits.ac.za</a></td>
</tr>
<tr>
<td>University of Zululand</td>
<td>035 902 6346/6030</td>
<td><a href="http://www.uzulu.ac.za">www.uzulu.ac.za</a></td>
</tr>
<tr>
<td>Vaal University of Technology</td>
<td>016 950 9000</td>
<td><a href="http://www.vut.ac.za">www.vut.ac.za</a></td>
</tr>
<tr>
<td>Walter Sisulu University for Technology &amp; Science</td>
<td>047 502 2111</td>
<td><a href="http://www.wsu.ac.za">www.wsu.ac.za</a></td>
</tr>
</tbody>
</table>
This booklet has outlined important and relevant information on careers in health. In the consideration of one's life work, mission and legacy to humanity we are often motivated by a need for self-actualisation. The GDoH urges young, compassionate South Africans to answer to a higher calling and choose a career in health sciences to serve the country.

We also offer bursaries to deserving applicants as part of our recruitment strategy. In the current global financial crisis this is an important consideration. It is important to note that not all careers in health require mathematics and Science; for almost all professional categories there are midlevel workers who provide much needed service and assistance. Some of these learning programmes do not require mathematics and science as an entry requirement.

Contact details: Knowledge management

Tel: 011 355 3846
Fax: 011 355 3021
Email: hrdhelpdesk@gauteng.gov.za