

## Careers available in the Health, Social Development and Veterinary Sectors

The learning programmes and careers that have been identified in this section do not form part of the primary focus of the HWSETA. They are listed here as an indication to persons entering the job market that there is a need for employees with these competencies in the health, social development and veterinary sectors and to guide learners with vocational guidance in areas where needs or hard to fill occupations and scarce skills have been identified. However, it also lists some other occupations or careers in general for your convenience.

### Ambulance Worker / Emergency Care Worker

An ambulance/emergency care worker resuscitates and stabilises the condition of critically ill or injured persons by applying emergency care. At the scene of an emergency such a person would examine both the patient and the situation to decide upon appropriate treatment, which includes basic life-support and treatment of wounds and fractures. The patient is transported to hospital by ambulance and receives the necessary care en-route.

#### Study Requirements:

Senior Certificate for a diploma course and Grade 9 Certificate for in-service training; Compulsory subjects: Mathematics, Physical Science; Recommended subjects: Biology; In-service training: Basic Ambulance Course (BAC): A four-week orientation and training course must be passed for permanent appointment.

#### Training Requirements:

Ambulance College: After 6 months service you may enrol for the Ambulance Emergency Assistant (AEA) course of 11 weeks offered by the Ambulance College. Successful candidates register at the Health Professions Council of South Africa (HPCSA) as ambulance emergency assistant.

#### Potential Employers:

Municipalities, divisional councils and provincial administrations; Industry; Private ambulance organisations; Private clinics and hospitals; Civil defence units; SANDF, and the mining industry.

#### Skills Required:

Practical and social skills; the ability to get things done in a practical and useful way; an understanding of people and their problems.

### Anaesthetist (see medical doctor)

An Anaesthetist is a medical doctor specialising in the administration of local and general anaesthetics to patients about to undergo a medical procedure. The anaesthetist consults with patients to ascertain their history in respect of allergies, previous reactions to anaesthetics and current medication and then monitors patients throughout the medical procedure and their recovery from the anaesthetic. He or she also follows up on the patient's post-operative recovery.

#### Study Requirements:

Senior Certificate with matriculation exemption for the completion of a degree programme at a University; Compulsory subjects are Mathematics and Physical Science with Biology as a recommended subject.

#### Training Requirements:

A medical degree can be obtained from a University which includes 5 years of theoretical training and a student internship of 1 year. Practical work at a hospital for 1 year is also required. Postgraduate study for specialisation as an anaesthetist requires a further 4 years of study to obtain the MMed or FCP(SA) degree. Before commencing postgraduate study for specialisation, the candidate must be in possession of a medical degree and be registered as a medical doctor with the Health Professions Council of South Africa for 1 year. The candidate must also register as a specialist with the HPCSA after successfully qualifying as a specialist.

#### Potential Employers:

State and private hospitals, clinics, private practice

#### Skills Required:

Scientific skills include scientific thinking to solve many different problems in the fields of medicine and other science fields and to interpret complex scientific information. Social skills include understanding people and their problems.

### Auxiliary Health Worker

The auxiliary health worker is educated in basic patient-care skills such as simple massage, dispensing non-prescription

medicines and giving nutritional advice. The auxiliary health worker can either serve the community on a voluntary basis or can work for large hospitals or clinics. Physiotherapists and occupational therapists also require assistants and offer programmes which will equip the worker to undertake basic therapy.

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**Study Requirements:**

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No specific requirements are required although a Grade 10 Certificate may be necessary for some positions; Compulsory subjects: None; Recommended subjects: Biology; In-service training: Large hospitals and clinics offer the auxiliary health worker in-service training

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**Training Requirements:**

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For the assistant physiotherapist and occupational therapist an in-service training programme (one year) comprising both lectures and clinical practice is available. On completion of training the person must register with the Health Professions Council of South Africa (HPCSA).

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**Potential Employers:**

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Large hospitals, Clinics, Physiotherapists (assistant physiotherapist) and Occupational therapists (assistant occupational therapist)

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**Skills Required:**

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Social and people skills include understanding people and their problems.

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**Basic & Advanced Life Support**

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Registered doctors, nurses and paramedics are educated in the skills and knowledge required for successful participation in team-based resuscitation attempts. Basic and Advanced Life Support courses are regulated by the Resuscitation Council of Southern Africa in order to assist healthcare professionals, regardless of their level of skill and knowledge, to improve their understanding and skills in the techniques of resuscitation and emergency care.

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**Child and Youth Care Worker**

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The child and youth care professional is responsible for using his/her expertise to maintain and secure a healthy and safe environment that will help children and youth reach their full potential. The most important function, however, is to take care of the children's emotional needs. Children in children's homes and places of safety need extra love and reassurance to help them recover from their traumatic experiences.

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**Study Requirements:**

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Grade 10 Certificate, Some employers prefer a Senior Certificate; A four-year degree can also be completed at a University of Technology; The HWSETA offers a learnership in Child and Youth Care which is at NQF Level 4; Compulsory subjects: None; Recommended subjects: Languages

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**Training Requirements:**

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In-service training: The child and youth care worker is trained to effectively perform their duties.

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**Potential Employers:**

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Children's homes, Places of safety and Boarding schools

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**Skills Required:**

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Social and people skills include an understanding of people and their problems and to help individuals with their mental, spiritual, social, physical, or vocational concerns

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**Clinical Lecturers**

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Clinical lecturers are mostly speciality specific trainees who have completed a higher degree or degrees at a University enabling them to complete specialist clinical training. Academic clinical lecturers can be found in a variety of science disciplines and specialities such as health sciences, veterinary science and dental specialities.

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**Community Development Worker**

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Community Development Workers or CDWs are special public servants who are undergoing training to enable them to enter communities and households, engage with citizens and determine what services are needed, to ensure that these services such as welfare, health, housing, education and training are accessible. Courses are offered at a number of tertiary institutions throughout the country as well as postgraduate courses in development studies. For a learnership contact the nearest municipality.

Information about CDWs can also be obtained from Government Departments such as the Department of Public Service and Administration.

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**Community Worker (Family Planning)**

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The community worker responsible for family planning is given a thorough grounding in the theory of family planning as well as practical training in teaching the subject. The worker is managed by regional planners and organisers, who help develop training strategies and new schemes. The family planner is usually a qualified health or social worker.

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**Study Requirements:**

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Grade 10 although a Senior Certificate is recommended; Compulsory subjects: None; Recommended subjects: Biology

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**Training Requirements:**

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In-service training: The family planning and community worker receives in-service training to effectively perform the duties required.

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**Potential Employers:**

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The Department of Health, municipalities and private organisations

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**Skills Required:**

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Social and people skills include an understanding of people and their problems

### Data Team Leader (data capturing)

The Data Team Leader oversees all data maintenance activities, including those within the resourcing, performance management and remuneration and reward areas of companies in different fields. The person ensures that a high quality service is delivered to customers in meeting of Service Level Agreements. Among others, he or she supervises the employee data management team to ensure timely data capturing, accurate execution of pre month-end validations and sign off of audit trails, identify and support workforce development opportunities and coach and train entry-level officers and assistant officers. Minimum requirements include Grade 12 and at least 4 years experience in the field.

### Dental Specialists

A dental specialist is a dentist that has obtained a specialised qualification through postgraduate studies at a University. Dentists must obtain a dentistry degree. Numerous challenges and stimulating opportunities are offered by dentistry. The dentist renders high quality oral healthcare to the patient. Various specialised fields exist in which the dentist can specialise. Dental specialists can have their own practices and can also be employed by hospitals, the Government, training hospitals, and specialised clinical practices. Dentists must be registered at the Health Professions Council of South Africa (HPCSA).

### Dental Assistants

Dental assistants are trained in dentistry techniques to assist dental practitioners. Among other things, the dental assistant will prepare and sterilise dental equipment, meet the patient, prepare them for treatment and assist the dentist by passing the instruments and take and develop X-rays.

### Dental Therapy

Dental therapy encompasses the treatment of diseases and conditions that affect the teeth and gums. Dental therapists (sometimes also known as oral health practitioners) are dental care professionals who work as part of the dental team and can carry out a range of procedures that are prescribed by a registered dentist.

### Early Childhood Development

Among others, Unisa offers a certificate programme to train educators in Early Childhood Development (ECD). Admission requirements include a Senior Certificate or Grade 12 qualification, other relevant certificates (prior learning), or 2 years relevant teaching experience in the ECD field as well as any teacher's certificate or diploma.

### Emergency Care Technicians

An Emergency Care Technician (ECT) course covers computer training, HIV and AIDS counselling, emergency medical care, medical rescue (vehicle rescue, rope rescue and fire and search rescue). Learners work on response vehicles and ambulances when they qualify. ECTs receive training at EMRS Colleges and Universities of Technology.

### Emergency Care Technologist

An Emergency Care Technologist provides immediate emergency care to sick or injured persons. They must, among other things, try to resuscitate and stabilise patients and prevent further injuries. They drive in specially equipped vehicles to an emergency scene and give appropriate treatment to patients at such a scene.

#### Study Requirements:

Senior Certificate for a Diploma; Grade 9 Certificate for in-service training;

#### Compulsory subjects:

Mathematics and Science; Recommended subjects: Biology.

#### Training Requirements:

In-service training: Basic Ambulance Course (BAC): A 4-week orientation and training course must be passed for permanent appointment. The candidate may enrol for the Ambulance Emergency Assistant (AEA) course offered by the Ambulance College. Successful candidates register at the Health Professions Council of SA (HPCSA).

#### Potential Employers:

Provincial and private ambulances and emergency services; local authorities, civil defence units.

#### Skills Required:

People and social skills with regard to understanding people and their problems.

### Forensic Scientist

This career is based mostly on laboratory work, which includes DNA matching of suspects in a crime, semen analyses, disputed maternity issues, etc. Forensic scientists can also assist in compiling profiles for the police in the event that the remains of a victim of crime such as bones and skulls have been found. A Senior Certificate with matriculation exemption is required to complete a degree programme at a University while postgraduate qualifications can also be obtained. Mathematics and Science are required subjects. Forensic scientists can work for the South African Police Service (SAPS), hospitals, universities and specialised laboratories. The National Forensic Sciences Laboratory accepts BSc (Medical Sciences) graduates.

### Herbalist/Herbologist

A herbalist/herbologist is a professional trained in herbalism, the use of herbs (also called botanical or crude medicine) to treat others and is skilled in the therapeutic use of medicinal plants. Basic botany and plant identification are absolutely essential skills in the repertoire of the herbalist/herbologist.

## HIV/AIDS Management Practices

Courses in HIV/AIDS management are aimed at health professionals, for example nursing professionals who need to gain competence in the management of HIV/AIDS and to acquire or update skills with regard to aspects such as the diagnosis and management of HIV/AIDS, counselling and palliative care.

## Hospice Worker

A volunteer hospice worker is trained to take care of the psychological and physical needs of patients and to reduce their pain and discomfort as much as possible. Hospices operate on a voluntary-contribution basis, thus they require the services of professional fund-raisers to help them raise funds to keep the institution running. Hospice workers also spend time with patients and their families helping them to cope with the trauma of death.

### Study Requirements:

No specific requirements exist for volunteer hospice workers; Compulsory subjects: None; Recommended subjects: None.

### Training Requirements:

Hospices offer in-service training.

### Potential Employers:

Hospices.

### Skills Required:

People skills including the ability to help individuals with their psychological and physical concerns and trauma.

## Laboratory Technician

A laboratory technician is a medical professional. Working under the direct supervision of a physician or a medical technologist, they are required to administer tests of tissue, blood and bodily fluids in an effort to assist physicians in diagnosing and treating ailments. They examine tissues and blood, searching for organisms such as parasites and bacteria. They monitor tests and procedures that are being conducted. They match blood prior to transfusions and test blood for drug levels.

### Study Requirements:

Senior Certificate or equivalent qualification; Compulsory subjects are Mathematics and a Science subject.

### Training Requirements:

Training is mainly done at a University of Technology. In-house training is also provided.

### Potential Employers:

District hospitals (urban and rural), Department of Health, clinics, diagnostic practices.

### Skills Required:

Scientific skills include knowledge of certain diagnostic procedures.

## Management Development - HR, Financial, Supervision & Fundraising

Universities such as the University of KwaZulu-Natal offers a one year practical Management Development Programme (MDP) with seven modules which include Human Resources and Finance, providing an opportunity for new and aspiring managers to develop their potential.

## Medical Doctor

The medical doctor is a practitioner of the science of medicine which examines patients, diagnoses diseases, prescribes medications and treats diseases, disorders and injuries of the human body. The medical doctor can work as a general practitioner, in hospitals and as a specialist in a specific field. A medical doctor can also refer a patient to a specialist for treatment.

### Study Requirements:

Senior Certificate with matriculation exemption for the completion of a medical degree programme at a University; Compulsory subjects are Mathematics and Science with Biology as a recommended subject; Academic merit is important as a result of the competition to enter medical studies.

### Training Requirements:

Training is done at a University and can entail a study period from 5 to 7 years followed by a student internship of 1 year and a community service year at a hospital for another year. On completion of a medical degree programme, a student has to register with the Health Professions Council of South Africa (HPCSA) as a medical doctor.

### Potential Employers:

Hospitals (urban and rural), clinics, training hospitals, nursing homes, large industries and organisations, private practice, Government departments, clinics, diagnostic practices.

### Skills Required:

Scientific skills include developing new ideas and theories and to understand complex scientific and medical information. Social skills include the ability to work and communicate with people and to understand their problems.

## Medical Technologist

Medical Technology can be divided into four categories: blood transfusion technology, diagnostic, research and preparation of sera and vaccines, with diagnostic forming the major share. Here the medical technologist provides analytical information to the medical doctor enabling him or her to make a diagnosis and provide the relevant treatment.

### Study Requirements:

Senior Certificate or equivalent qualification; Compulsory subjects are Mathematics and a Science subject.

### Training Requirements:

A diploma course in Biomedical Technology comprises three years full time study at a University of Technology. The profession is regulated by the Society of Medical Laboratory Technologists of South Africa (SMLTSA).

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**Potential Employers:**

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District hospitals (urban and rural),  
Department of Health, clinics, specialised  
and diagnostic laboratories.

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**Skills Required:**

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Scientific skills include knowledge of  
certain diagnostic procedures.

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**Medical Specialists**  
(see medical doctor)

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Medical specialists are doctors who  
have completed advanced education and  
clinical training in a specific area of  
medicine (their specialty area). These  
can range from a general practitioner to  
a surgeon, orthodontist, dermatologist or  
gynaecologist. Specialisation normally  
takes place after postgraduate medical  
study at a University

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**Medicine & Clinical Associates**

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A Clinical Associate Programme (CAP) was  
introduced by the national Ministry and  
Department of Health and the training of the  
first intake of Clinical Associates (mid-level  
medical workers) has commenced at the  
Walter Sisulu University of Technology in  
2008. The clinical associate will specifically  
assist the doctor in district hospitals (urban  
and rural) with procedures. The focus of the  
clinical associate will be on emergency care  
and on procedures, in support of hospital  
doctors.

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**Study Requirements:**

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Senior Certificate or equivalent  
qualification; Compulsory subjects:  
Mathematics, Physical Science;  
Recommended subjects: Biology.

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**Training Requirements:**

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Certificate/diploma courses and in-house  
training.

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**Potential Employers:**

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District hospitals (urban and rural),  
Department of Health.

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**Skills Required:**

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Scientific skills include knowledge of  
certain emergency care procedures.

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**Medical Laboratory Assistant**

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The medical laboratory assistant works  
in medical pathology laboratories  
undertaking routine tasks, and supporting  
the work of biomedical scientists. A  
medical laboratory assistant carries out  
a variety of tasks such as preparing for  
tests and the use of computers to analyse  
and record the data. They also prepare  
solutions of chemicals and perform quality  
control on chemical stocks.

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**Study Requirements:**

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Senior Certificate or equivalent  
qualification; Compulsory subjects:  
Mathematics, Physical Science;  
Recommended subjects: Biology.

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**Training Requirements:**

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Certificate courses and in-house training.

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**Potential Employers:**

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Research organisations; Department of  
Health; South African Medical Research  
Council; Pharmaceutical companies

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**Skills Required:**

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Scientific skills include developing new  
ideas and theories and to understand and  
express complex technical and scientific  
information

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**Medical Technicians**

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Medical technicians perform a very similar  
role to medical technologists as they are  
also responsible for processing and analysis  
of medical specimens in a laboratory for  
diagnostic purposes. The difference is  
that instead of studying for three years  
at a University of Technology as medical  
technologists do, medical technicians jump  
right in and begin with in-house, hands-on  
training.

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**Study Requirements:**

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Grade 12 Maths and Life Sciences are  
recommended subjects but they aren't  
prerequisites.

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**Training Requirements:**

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Medical technicians train for 18 months  
in a registered training laboratory before  
taking the Society of Medical Laboratory  
Technologists of South Africa (SMLTSA)  
Board exam. After a further six months of  
practical training they can register with  
the Health Professions Council of South  
Africa (HPCSA) as medical technicians.

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**Potential Employers:**

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Diagnostic laboratories, the Government,  
universities and various research institutes

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**Skills Required:**

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An understanding of complex technical and  
scientific information

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**Medical Laboratory Scientist (MLS)**

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This is a healthcare professional who  
performs chemical, haematological,  
immunologic, microscopic, and  
bacteriological diagnostic analyses on  
body fluids such as blood, urine, sputum,  
stool and peritoneal fluid, as well as other  
specimens.

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**Study Requirements:**

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Training is mainly done through  
Universities and Universities of  
Technology. Compulsory subjects are  
Mathematics and Science while Biology is  
recommended.

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**Training Requirements:**

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Postgraduate training opportunities exist  
and the candidate can also register with  
the professional body in his or her field.

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**Potential Employers:**

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Clinical laboratories at hospitals,  
general practitioners, reference labs and  
biotechnology laboratories

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**Skills Required:**

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Scientific knowledge about various  
procedures involving specialised clinical  
procedures and tests

## Nursing

The activities of a nurse include curative, preventive and rehabilitative health care for families, communities and individuals. There are two main categories of nursing, namely a registered or professional nurse and an enrolled nursing auxiliary. The many responsibilities of the registered nurse (sister) include taking blood pressure and temperature, handling samples for laboratory tests, applying medication and giving injections, putting in and removing stitches, and managing wards or departments.

### Study Requirements:

To be a registered nurse requires four years of training at a University or a University of Technology. Universities of Technology mostly offer one year full-time nursing programmes. Requirements at a University include a National Senior Certificate (NSC) for degree purposes and Mathematics, Physical Science, Biology or Physiology as recommended subjects. Certain universities require a Further Education Certificate (level 4).

### Training Requirements:

Nursing College: Training is practical and theoretical. Training at the nursing college is done in collaboration with a university. Clinical or practical training is done at accredited training hospitals. The duration of the course is 4 years. Advanced training: The qualified nurse may study further in specialisation fields such as Paediatric Nursing Science, Orthopaedic Nursing Science, Intensive Nursing, Psychiatric Nursing, Community Health Nursing, Geriatric Nursing Science, etc.

### Potential Employers:

Hospitals, clinics, Government departments; South African National Defence Force; Health and welfare organisations; Municipalities, Medical doctors, Industrial organisations; Casualty wards, children's wards, medical, surgical, orthopaedic and psychiatric wards and communal clinics.

### Skills Required:

Social and people skills including the ability to work with people, to understand their problems and to be able to help people with mental, physical, psychological and social concerns.

Below is a list of most careers and/or qualifications in the nursing science field including specialisation fields:

- **Nurse** (General, Psychiatric, Community) & Midwife: A nurse is part of the large team of professional workers dedicated to rendering health services to the community. In general, nursing science requires 4 years of training at a University or University of Technology.
- **Diploma in Clinical Nursing Science, Health Assessment, Treatment & Care:** To complete this diploma, proof of current registration as a general nurse with the South African Nursing Council (SANC) is required as well as a senior certificate or an equivalent qualification, unless the SANC determines otherwise. Duration of the course is at least one academic year, leading to the registration of an additional qualification in Clinical Nursing Science, Health Assessment, Treatment and Care.
- **Advanced Midwifery & Neonatal Nursing Science:** In this field, the emphasis is on providing for the unique physical, psychological and mental needs of a woman and her baby within the family and the community.
- **Advanced Psychiatric Nursing Science:** The emphasis is on the mental health of individuals, families and communities.
- **Auxiliary Nurse:** One year training at a nursing school (available as HWSETA Learnership)
- **Enrolled Nurse:** Two year training at a nursing college or university is required (available as HWSETA Learnership). A two year Bridging course is designed to help enrolled nurses to become registered nurses and is available as HWSETA Learnership.

- **Medical & Surgical Nursing Science:** Critical Care Nursing – General: The nurse can specialise in this field, mainly working in a hospital's Intensive Care Unit (ICU)
- **Medical & Surgical Nursing Science:** Operating Theatre Nursing: This is a specific field in which the nurse can specialise.
- **Medical & Surgical Nursing Science:** Critical Care Nursing - Trauma & Emergency: This is a specific field in which the nurse can specialise.

### Nursing Auxiliary/Healthcare Assistant

A nursing auxiliary performs basic nursing tasks under the supervision of a registered nurse. Among other things, the nursing auxiliary carries out nursing procedures on a less specialised level, takes care of the ill, injured and weak and is involved in health guidance and counselling. A nursing auxiliary or healthcare assistant forms part of a team of professional workers such as nurses, doctors and other medical personnel

### Study Requirements:

Grade 10 Certificate although a Senior Certificate is preferred; Compulsory subjects: None; Recommended subjects: Mathematics, Physical Science, Biology.

### Training Requirements:

Training hospital: Certificate course (one year) at approved training hospitals, old-age homes and clinics. Advancement and further qualifications can be obtained by studying the courses for an enrolled or registered (professional) nurse.

### Potential Employers:

Hospitals; Government departments; South African National Defence Force; Health and welfare organisations; Medical doctors; Old-age homes; Rehabilitation centres. A nursing auxiliary may also be self-employed as private nursing auxiliary, caring for patients in their own homes.

### Skills Required:

Social skills including an understanding of people and their problems.

## Nutrition/Dietician

A Dietician is an expert on diet and nutrition. Within the profession there is a constant learning of skills and application of knowledge, allowing Dieticians to establish and implement the guidelines of maintaining healthy nutritional practices for all individuals. Among others, the dietician can render a service to the community, health authorities and hospitals.

### Study Requirements:

Senior certificate with matriculation exemption for completing a degree programme at a university; Compulsory subjects include Mathematics and Science while Biology is recommended.

### Training Requirements:

Postgraduate study can also be undertaken in specialised fields. The postgraduate Diploma in Hospital Dietetics is compulsory for registration with the Health Professions Council of South Africa and for employment by provincial administrations.

### Potential Employers:

Hospitals, nursing homes, clinics, universities, Government departments, the food industry, nutrition research units, consultant in private practice.

### Skills Required:

Scientific skills include the use of logical and scientific thinking to solve many different problems in medicine, the life sciences, natural sciences and social and economic sciences. Social or people skills including the ability to understand people and their problems.

## Occupational Health & Safety

Professionals in this field measure, manage, evaluate and improve the Occupational Health and Safety (OHS) within an organisation and ensure that quality audits are performed. They also assist in planning and implementing an Occupational Health and Safety Management System to manage workplace hazards, thereby improving the organisation's ability to achieve optimal health and safety standards.

## Occupational Therapy

Persons with a physical or mental disability are assisted by an occupational therapist to function as normally as possible in society by applying specific techniques and procedures in a scientific manner with regard to a patient.

### Study Requirements:

Senior Certificate with matriculation exemption for a degree programme; The duration of an occupational therapy course is normally four years at most universities; Mathematics and Science, among others, are compulsory subjects.

### Training Requirements:

On successful completion of the degree programme, the occupational therapist must register with the Health Professions Council of South Africa (HPCSA). They also have their own professional body with which they register. Further postgraduate degree programmes are also available.

### Potential Employers:

Hospitals, own practice, specialist clinics, academic institutions such as universities, training hospitals and the Government.

### Skills Required:

Scientific skills with regard to applying specific techniques and procedures as well as social or people skills when working and interacting with patients.

## Ophthalmology (see medical doctor)

The term ophthalmologist refers to an eye specialist for medical and surgical problems who qualified as a medical doctor or surgeon. Since ophthalmologists perform operations on eyes, they are considered to be both a surgical and medical specialist. As such ophthalmology deals with the diseases and surgery of the visual pathways, including the eye, hairs, and areas surrounding the eye.

### Study Requirements:

Senior Certificate with matriculation exemption for a degree programme as medical doctor at a University. Specialisation may take place after

the successful completion of the degree programme which can range between 5 to 6 years. Compulsory subjects include Mathematics and Science as a requirement.

### Training Requirements:

After successful completion of the degree programme as a medical doctor, the candidate must register at the Health Professions Council of South Africa (HPCSA). After obtaining the specialist degree programme, he or she can also register as specialist at the HPCSA.

### Potential Employers:

Own specialist medical practice, private and public hospitals and training hospitals at Universities, medical partnerships.

### Skills Required:

In-depth medical knowledge of the field as well as comprehensive practical skills to perform surgery and do examinations.

## Optometry

Optometry is the science and art of managing human vision conditions. Optometrists measure the efficiency of their patients' eyes and take steps to improve or prevent deterioration of vision by prescribing spectacles, contact lenses and/or eye exercises. The duration of the course at University and a University of Technology is four and three years, respectively.

## Oral Hygiene

Oral hygiene is an excellent choice of profession, especially for women due to the fact that her day can be arranged according to her own needs. It is a profession with a high degree of job satisfaction, security and a good income. The oral hygienist is trained to educate people with regard to the maintenance of good oral hygiene and to carry out preventive treatment procedures.

## Orthotic & Prosthetic Technicians

Orthotic & Prosthetic (O & P) Technicians assist the disabled by fabricating the orthopaedic braces (orthoses) and artificial limbs (prostheses) necessary for their rehabilitation. They are trained and skilled to provide comprehensive technical support services in their field.

### Study Requirements:

Senior Certificate; Mathematics and Science are recommended but not compulsory.

### Training Requirements:

A National Diploma in Orthotics and Prosthetics can be completed at a University of Technology.

### Potential Employers:

Hospitals, own business practice and manufacturing companies.

### Skills Required:

Comprehensive technical skills and knowledge to interact with clinical prosthetists and orthotists.

## Orthopaedic Technicians

Orthopaedic technicians work in trauma and orthopaedic clinics where they undertake and apply plastering techniques to patients. Casts could be used following an accident or surgery, or for particular orthopaedic conditions. Some hospitals in South Africa also offer training courses in this field.

## Pathology (see medical doctor)

Pathology is the study of disease and its causes, development, and consequences. A Pathologist is a scientist or physician who interprets and diagnoses changes in tissues and body fluids caused by disease. Pathologists can also conduct post mortems to determine the cause of death in people. After obtaining a medical degree at a University a medical doctor can specialise as a pathologist by means of a postgraduate qualification. To obtain a medical degree, Mathematics and Science are minimum required subjects. Pathologists can work in partnership with hospitals, clinical laboratories and medical practices. They can also work for the Governments and

have their own practices.

## Paramedics (Emergency medical care)

It is a paramedic or emergency care practitioner's responsibility to render advanced life support to critically ill or injured patients in the pre-hospital emergency environment. They also work together with ambulance personnel and health professionals such as medical doctors who they must inform about a patient's condition after transporting him or her to a hospital.

### Study Requirements:

Senior Certificate or equivalent qualification; Mathematics and Science are required subjects.

### Training Requirements:

The NDip: Emergency Medical Care is a three year course that can be completed at a University of Technology. Further in-house training may also take place through completion of various certificate courses.

### Potential Employers:

Local authorities, municipalities, ambulatory services, emergency services in urban and rural areas.

### Skills Required:

The paramedic must have scientific and medical knowledge and skills to do his or her job. He or she must also be able to interact with people in a sympathetic way in treating a patient.

## Pharmacist

The pharmacist renders a service by taking responsibility to ensure that the patient benefits as much as possible from his or her medicine therapy and must ensure the rational use of medicine as well as the development, production, distribution, correct use, and quality assurance of medicines. The pharmacist forms the link between the pharmaceutical manufacturer and the medical doctor, the doctor and the patient, and the patient and the community. The nature of a pharmacist's work varies depending on the pharmaceutical field in which the pharmacist is employed.

### Study Requirements:

Senior Certificate with matriculation exemption for a degree programme; Compulsory subjects: Mathematics, Physical Science; Recommended subjects: Biology

### Training Requirements:

Practical training: A year of internship at an approved institution (such as retail pharmacy, hospital pharmacy, teaching institution or laboratory in the pharmaceutical industry). After the candidate has completed both a degree course and practical training, he or she registers at the South African Pharmacy Council.

### Potential Employers:

Retail (private) pharmacies; Hospitals and clinics; Government departments; Provincial administrations; Department of Health; South African National Defence Force; Research institutes; Pharmaceutical manufacturers; Universities; Own business.

### Skills Required:

The pharmacist needs scientific skills which include logical and scientific thinking to solve many different problems in medicine, the life sciences, the natural sciences, and the social and economic sciences.

## Pharmacist Assistants (Basic and Post Basic)

Learnerships are offered by the HWSETA at participating employers countrywide in both the public and private sectors. Requirements for Post Basic are Grade 12 with Mathematics and Science subjects.



## Pharmacy Technicians

A pharmacy technician is one who does pharmacy related work under the direct supervision of a licensed pharmacist. Pharmacy technicians often do the routine tasks associated with preparing prescribed medication and providing drugs to patients. However, licensed pharmacists check all medications before they go to the patient, and only pharmacists may counsel patients on the proper use of medications.

## Phlebotomy Technician

Phlebotomy is the science of drawing blood. The primary function of a phlebotomy technician is to obtain patient blood specimens by venipuncture or micro-techniques. The phlebotomy technician aids in the collection and transportation of other laboratory specimens, and may be involved with patient data entry. A phlebotomy technician also draws blood for transfusions, donations and analysis.

### Study Requirements:

Senior Certificate; Science and Biology are recommended subjects but not compulsory.

### Training Requirements:

Among others, training takes place at Technical Vocational Education and Training (TVET) Colleges. In-house training is also provided at organisations where these technicians are employed.

### Potential Employers:

Community clinics, Government institutions, Pathology laboratories and general practitioners.

### Skills Required:

Scientific and technical knowledge about blood specimens and specific techniques to draw blood as well as social skills when working with people.

## Physiotherapist

The physiotherapist uses various methods as treatment in Physiotherapy to restore or promote the normal, physical functioning of the individual including exercise therapy, electrotherapy, massaging and mobilisation. Like Occupational

Therapy, Nursing Science and Dietetics, Physiotherapy degrees ranging from 3 to 4 year courses are offered at most universities and are part of the so-called Allied Health Sciences fields. Opportunities for postgraduate studies are available.

## Probation Service Officers

Probation officers are social workers who carry out work in the fields of crime prevention, treatment of offenders, care and treatment of victims of crime, and working with families and communities. Probation officers are appointed by the Minister of Social Development, and are officers of every magistrate's court.

## Radiographer (all disciplines)

This is one of the rapidly growing occupations in modern healthcare. Radiography is the use of X-rays, other radiation techniques or ultra sound for the detection and treatment of any illness. The radiographer works at the request of a qualified doctor or dentist. There are four categories of radiography, namely therapeutic radiography, diagnostic radiography, nuclear medicine and ultrasound.

### Study Requirements:

Senior Certificate with matriculation exemption for a degree course and a Senior Certificate for a diploma course; Compulsory subjects: Mathematics, Physical Science; Recommended subjects: Biology.

### Training Requirements:

The student radiographer and qualified radiographer should register with the Health and Professions Council of South Africa (HPCSA).

### Potential Employers:

Hospitals and clinics (private as well as government hospitals); The Department of Health; The Chamber of Mines; The National South African Defence Force; Municipalities; Private Radiological Practices; Universities and Universities of Technology.

## Skills Required:

Scientific and practical skills include the use of logical and scientific thinking to solve many different problems in medicine, the life sciences, the natural sciences, and the social and economic sciences and to get things done in a practical and meaningful way.

## Social Workers

Social work is both a profession and social science. It involves the application of social theory and research methods to study and improve the lives of people, groups, and societies. Social workers are concerned with social problems, their causes, their solutions and their human impacts. They work with individuals, families, groups, organisations and communities

### Study Requirements:

A Senior Certificate with matriculation exemption for a degree programme and a Senior Certificate for a diploma course. Various universities offer 3 – 4 year degrees in Social Work.

### Training Requirements:

These practitioners must also obtain a license or be registered with a professional regulating body.

### Potential Employers:

Professional social workers work in a variety of non-profit, for-profit, or public social service settings, including hospitals; hospices; community health agencies; schools, faith-based organisations, and even the military. Some social workers work as psychotherapists, counsellors, or mental health practitioners.

### Skills Required:

As human services management, social welfare policy analysis, community organising, advocacy and teaching are part of the tasks of the Social Worker, strong social skills are needed which include the ability to work with people from different backgrounds.

## Social Auxiliary Worker

A Social Auxiliary Worker provides assistance and support to social workers with the promotion of social change, problem solving in human relationships and the empowerment and liberation of people to enhance social well-being under the guidance and supervision of the social worker. Duties can also include administrative work.

Candidates with a Senior Certificate (Grade 12) will be considered. The HWSETA accredits service providers that offer social auxiliary training. Please make sure that the provider is recognised by the South African Council for Social Service Professions.

## TB Technicians

TB technicians are responsible for operations in TB or Tuberculosis laboratories and ensure a smooth running of the labs by minimising hazards and contamination risks. He or she will also ensure compliance with all regulatory guidelines, ensure safety and help increase laboratory efficiency. Among others, he or she must be accessible to respond to emergencies with monitored and essential laboratory equipment in TB laboratories.

### Study Requirements:

Senior Certificate with matriculation exemption for a degree course; Compulsory subjects are Mathematics, Physical Science with Biology as a recommended subject. The minimum educational requirement to qualify for this position is a BSc (Hons) degree in medical virology or medical microbiology or an equivalent degree, including a BTech in Medical Technology.

### Training Requirements:

Further courses to improve skills levels are available.

### Potential Employers:

Hospitals (private as well as government hospitals), the Department of Health, universities and diagnostic laboratories specialising in working with TB.

## Skills Required:

Scientific and practical skills include the use of logical and scientific thinking in solving many different problems in the health sciences.

## Ultrasound Technicians (Sonographers)

Sonographers are specialists in Diagnostic Medical Sonography. A Sonographer is an expert in the use of a Sonograph machine that uses high-frequency sound waves to project images of the area of the body that you would be examining. Many times you would begin by walking a patient through the procedure and taking any medical history that you might need in order to continue. Most Sonographers work in hospitals or medical practices. In order to obtain a degree one has to study for 2 to 4 years at a University of Technology. On the other hand if a sonographer studies for one year he may obtain a certificate but is not accredited.

## Veterinarian

A veterinarian specialises in the treatment and disease management of companion animals (horses, cats, dogs, birds and other exotic pets), production animals (cattle, pigs, goats) as well as wildlife. Veterinarians are also responsible for the prevention of diseases of these animals and are involved in ensuring that food such as meat and milk is certified as disease free for human consumption and for the purposes of exports and imports, thereby caring for the health and wellbeing for both animals and humans. They design strategies for disease control such as Foot and Mouth disease and is involved in research in various fields such as veterinary tropical studies, production animal studies and companion animal clinical studies.

### Study Requirements:

Senior Certificate with matriculation exemption for a degree course. Among others, compulsory subjects include Mathematics, Physical Science and English.

## Training Requirements:

The Faculty of Veterinary Science of the University of Pretoria is the only institution in the country that is offering a veterinary science degree (BVSc) programme as well as a 2 year University Diploma in Veterinary Nursing (DipVetNurs). A new 6 year curriculum was recently introduced for the BVSc degree programme.

Candidates have to successfully complete the degree programme to be considered for entry into postgraduate studies. The South African Veterinary Council (SAVC) is the regulatory body for the profession. After obtaining their qualification, veterinarians must register with the SAVC. Postgraduate studies up to doctoral level can also lead to specialisation and the successful candidate must also register with the SAVC as specialist.

### Potential Employers:

Own practice, training hospital (Onderstepoort Veterinary Academic Hospital), universities, animal health clinics, veterinary clinics, veterinary practices and partnerships, zoological gardens, game farms, pharmaceutical companies

### Skills Required:

The ability to work with and care for animals and to interact with people, clients and owners of animals. Scientific and practical skills include the use of logical and scientific thinking in solving many different problems in the veterinary science field

## Vitamin Specialist

A Vitamin Specialist performs all functions relating to ordering products with an emphasis on vitamins, cosmetics and skin care and provides current, knowledgeable and courteous customer service with regard to those products. He or she is also responsible for achieving sales targets and to process invoices and returns for these products.