Health Sciences

www.wits.ac.za/health/

The Faculty of Health Sciences has an outstanding international reputation and many of our graduates are leaders in their fields, both in South Africa and worldwide.

Among the Faculty's renowned members are: the late Emeritus Professor of Anatomy, Phillip Tobias, who placed Wits and South Africa at the forefront of research into human evolution, the late Dr N Motlana, physician to former President Mandela and chairman of New African Investments Limited (NAIL), Nutrition and Medicine expert, Professor Harry Seftel and Professor Sydney Brenner, joint winner of the 2002 Nobel prize for Medicine.

The Faculty offers students superb training with practical clinical experience in no less than five major hospitals.

The study of health sciences emphasises the importance of physical and mental wellbeing. Empathy, patience, initiative, integrity and technical aptitude are the essential attributes of the health-care giver.

A profession in healthcare can be physically, mentally and emotionally demanding, and healthcare practitioners are frequently exposed to life-threatening diseases. In South Africa, there is an urgent need for healthcare professionals who can dedicate themselves to preventative and curative healthcare among needy communities.

It is important that students are exposed to the needs of the various communities which make up South Africa and that they can cope both with sophisticated equipment in urban hospitals and basic equipment in rural areas.

The study of health sciences provides access to various careers either as a professional practitioner, in education as a lecturer, or in medical research.

NSC MINIMUM ADMISSION REQUIREMENTS

REFER TO PAGE 24 FOR NSC ADMISSION POINT SCORES (APS)

NB: Meeting the minimum requirements does not guarantee a place. Final selection is made subject to the availability of places, academic results and other entry requirements where applicable.

PROGRAMME	APS	SUBJECTS & ACHIEVED SCALE	SELECTION PROCEDURES
• Bachelor of Health Sciences (3 years) • Biomedical Sciences and Biokinetics - BHSc (3 years) • Bachelor of Medicine & Bachelor of Surgery - MBBCH (6 years) • Bachelor of Pharmacy - BPharm (4 years) • Bachelor of Science in Physiotherapy - BSc (Physiotherapy) (4 years)	The Faculty of Health Sciences does not calculate an APS score. Several criteria are considered for selection e.g. Academic performance and National Benchmark Test scores. The Faculty may use a Biographical Questionnaire in addition to the above criteria.	English HL **OR** 1st Add Lang 5 Mathematics 5 Life Sciences **AND/OR** Physical Science 5	If you are applying to the Faculty of Health Sciences, you will not be selected solely on your school leaving results, although they are very important. A composite index is calculated, taking into consideration (1) your academic results for FIVE subjects and (2) National Benchmark Test scores. Only five subjects are used to derive a matriculation score, which is calculated according to the percentages obtained, NOT symbols. These are English, Mathematics, Physical Science/ Life Sciences and the best two other subjects. • **ALL applicants** (excluding applicants who are applying to the Graduate Entry Medical Programme - GEMP only) **are required to write the National Benchmark Test (NBT)**. • GEMP applicants may be invited to the Wits Additional Placement Test (WAPT). For more information on the WAPT please refer to: **www.wits.ac.za/health/gemp** • ALL GEMP applicants need to prepare for the WAPT in case you are invited to write the test (please refer to page 26 for further details). • ALL GEMP applicants who are invited to the WAPT may be expected to complete a Biographical Questionnaire on the day of the test. • ALL applicants to BSc (Occupational Therapy) must spend time observing an Occupational Therapist. • ALL applicants to BSc (Physiotherapy) must spend time observing a Physiotherapist.
• Bachelor of Dental Science - BDS (5 years)		English HL **OR** 1st Add Lang 5 Mathematics 5 Life Sciences 5 Physical Science 5	
• Bachelor of Nursing - BNurs (4 years) • Bachelor of Science in Occupational Therapy - BSc(OT) (4 years)		English HL **OR** 1st Add Lang 4 Mathematics 4 Life Sciences **AND/OR** Physical Science 4	
• Bachelor of Clinical Medical Practice - (BCMP) (3 years) • Bachelor of Oral Health Sciences - (BOHSc) (3 years)		English HL **OR** 1st Add Lang 4 Mathematics 4 **OR** Mathematical Literacy 7 Life Sciences A**ND/OR** Physical Science 4	

Compliance

A Health Sciences practitioner without the necessary skills and expertise may improperly endanger the life and limb of the patients he or she treats and thereby infringe the patient's fundamental human rights. Great effort has been made to identify the minimum requirements for training to meet this aim. Aspects of clinical practice including history taking, examination of the patient and basic patient care issues must be completed and not influenced by the individual's belief system. The standard of ethical practice which supports an open and trusting relationship between the patient and the health professional must be adhered to.

According to this commitment, the Faculty of Health Sciences will not condone any personal belief system that prevents, interferes with, or is contrary to these minimum requirements for training. After intensive consultation, we have ascertained that the various belief systems would support this approach in the training of the health professionals.

In practice, a number of situations have been noted, where students' religious beliefs appear to conflict with programme requirements. These include but are not limited to:

- Travelling on certain days, or travelling unaccompanied on certain journeys
- Attending a certain venue for training purposes
- Attending lectures at certain times of certain days
- Examining patients of both sexes
- Acquiring appropriate clinical skills relating to Choice on Termination of Pregnancy (CTOP/Sterilisation procedures)
- Complying with certain clothing requirements e.g. not wearing veils, which might impede or detract from patient care or appropriate training
- Performing certain skills (e.g. scrubbing) in the available facilities
- Being assessed on religious holidays which are not on the University's official list of approved holidays (published and placed on all notice boards at the start of each academic year)
- Being on intake duty on certain days or nights.

Such objections and failure to comply with programme requirements would interfere with the training offered by the Faculty. The student in question would therefore fail to meet the requirements for a particular course as stipulated by each particular School or Department. The final decision regarding assessment and whether requirements have been met remains with the School or Department concerned.

The following situations are known to conflict with requirements:

- In any Department/Discipline requiring physical/personal interaction with patients e.g. Psychiatry, Surgery, Emergency Medicine etc. or, where a specific dress code is required e.g. Physiotherapy, Nursing etc., where the wearing of veils is unacceptable
- In the School of Oral Health Sciences students wearing veils will be required to identify themselves at the start of every clinical session and to conform to the clothing requirements as laid down by required infection control protocols
- In tests or examinations, where students wearing veils will be required to identify themselves prior to commencement.

The process is guided by the following principles:

- Meeting the minimum requirements for training as set by the Faculty
- A culture of religious tolerance.

This information has been drawn up and approved by all of the Faculty's Undergraduate Committees and the Teaching and Learning Committee.

Any clarity required may be directed to the Office of the Assistant Dean (Student Affairs).

Statutory bodies:

- All students **registering for the first time** for the MBBCh, BSc (Physiotherapy), BDS, BOHSc and BCMP have to register with the Health Professions Coucil of South Africa (HPCSA).
- All new BNurs students are required to register with the South African Nursing Council.
- All new Pharmacy students register with the South African Pharmacy Council.

Please bring two certified copies of your identity document when you register.

Note!

Before applying for admission, applicants should be aware that from time-to-time they may be exposed to life-threatening diseases. The University is concerned about the risks that HIV/AIDS poses to its students. It is recognised that the main route of acquisition of HIV is via unprotected sexual contact but the Faculty wishes to draw to your attention that in the occupational setting, an additional risk exists to its students and healthcare professionals. The risk, however, remains low (0,36% following a needle stick injury). To minimise the risk of occupational acquisition of HIV infection, instruction in "Universal Precautions" will be provided to all students. In addition, when appropriate, instruction on post-exposure prophylaxis will be provided. Applicants who know at the time of application that they are HIV+, are advised that they may have a reduced immune response system and that this renders them vulnerable to certain infectious diseases which they are likely to encounter in their daily activities in the hospitals.

Contents

Programmes

CLOSING DATE FOR APPLICATIONS 30 JUNE 2017

Limited places are available. No changes or additions to your selected programme will be permitted after 30 June 2017

Applications

There are many more applicants than places available and academic potential is very important although other criteria are also considered.

Please give your selection careful consideration. No changes or additions to your selected programme will be permitted after **30 June 2017**.

Because the competition for places in the Health Sciences is fierce, applicants may not be successful, and are therefore advised that one of their selections should be in a faculty other than Health Sciences.

All eligible applicants to Health Sciences are required to write the National Benchmark Test in 2017 (refer to page 26 for more information).

Enquiries regarding applications

Applicants will be advised in writing of the progress of their application as soon as a decision is made by the Admissions Committee. More than 35,000 applications are considered annually by the Faculty and as great care is taken, selection proceeds slowly. Applicants should therefore be patient. Nevertheless, enquiries are welcome. Enquiries should be made by the applicant and not by family or friends, to your assigned admissions consultant in the Student Enrolment Centre in the first instance.

Required documentation

Applicants who have completed tertiary qualifications at other institutions must ensure that they supply an academic record and certificate of good conduct to the Student Enrolment Centre. Please note that credit certificates or examination results are not acceptable. Failure to do so will result in delays in the selection process and the possibility that your application will be withdrawn.

International Applicants

The Faculty of Health Sciences is only able to consider a limited number of international applicants, who have "foreign" school-leaving certificates such as the GCE 'A' levels or 'AS' levels or HIGSCE, the International Baccalaureate or the German Abitur. All "foreign" school-leaving certificates must be evaluated for exemption equivalence.

Note:

Application enquiries should be made to the Student Call Centre. The details of the enquiry will be recorded and passed to the relevant member of staff. **Personal interviews will not be given without an appointment.**

www.wits.ac.za/askwits

UNDERGRADUATE PROGRAMMES OFFERED

- Bachelor of Health Sciences - BHSc **(3 years)** (there are two plans - Biomedical Sciences and Biokinetics)
- Bachelor of Clinical Medical Practice - BCMP **(3 years) (School of Clinical Medicine)**
- Bachelor of Dental Science - BDS **(5 years) (School of Oral Health Sciences)**
- Bachelor of Medicine and Bachelor of Surgery - MBBCh **6 years** (or **4 years** for suitably qualified graduates)
- Bachelor of Nursing - BNurs **(4 years) (School of Therapeutic Sciences)**
- Bachelor of Science in Occupational Therapy - BSc(OT) **(4 years) (School of Therapeutic Sciences)**
- Bachelor of Oral Health Sciences - BOHSc **(3 years) (School of Oral Health Sciences)**
- Bachelor of Pharmacy - BPharm **(4 years) (School of Therapeutic Sciences)**
- Bachelor of Science in Physiotherapy - BSc(Physiotherapy) **(4 years) (School of Therapeutic Sciences)**

Bachelor of Health Sciences

The Bachelor of Health Sciences provides an appropriate undergraduate qualification to fulfill the needs of a number of health-related industries, including biotechnology, forensic science, health service and hospital management, health policy and economics, insurance and medical aid, medical science and research, the pharmaceutical industry, sport and fitness.

All students major in Fundamentals of Health and Disease.

Currently there are two study plans available in the Bachelor of Health Sciences Programme:

- **Biokinetics** – providing applicants with the opportunities to pursue studies and professional training as a biokinetisist (a specialised exercise therapist)
- **Biomedical** – offering exciting opportunities within the biological sciences such as molecular medicine, physiology, applied anatomy and pharmacology

Honours degrees are available for many of the major subjects completed within the Bachelor of Health Sciences degree including Forensic Sciences, Human Genetics, Medical Cell Biology and Physiology.

Biokinetics

BIOKINETICS						
PROGRAMME	**1ST YEAR CURRICULUM**	**CODE**	**2ND YEAR CURRICULUM**	**CODE**	**3RD YEAR CURRICULUM**	**CODE**
Bachelor of Health Sciences **Biokinetics (MB003)**	Introduction to Medical Sciences (36 Points)	APES1001	Human Anatomy II (48 Points)	ANAT2020	Fundamentals of Health and Disease III (72 Points)	FAMH3002
	Chemistry (36 Points)	CHEM1048	Fundamentals of Health and Disease (24 Points)	FAMH2004	Exercise Science III (72 Points)	STHS3000
	Physics I (36 Points)	PHYS1024	Exercise Science II (48 Points)	STHS2000		
	Medical Thought and Practice for Pharmacy and Health Sciences (24 Points)	SCMD1003	Physiology and Medical Biochemistry II (48 Points)	PHSL2004		
	Sociological Foundations of Health (18 Points)	SOCL1016				
	Basic Principles of Group and Individual Psychology I (18 Points)	PSYC1004				

Biomedical Sciences

BIOMEDICAL SCIENCES						
PROGRAMME	**1ST YEAR CURRICULUM**	**CODE**	**2ND YEAR CURRICULUM**	**CODE**	**3RD YEAR CURRICULUM**	**CODE**
Bachelor of Health Sciences **Biomedical Sciences (MB000)**	Introduction to Medical Sciences (36 Points)	APES1001	Human Anatomy II (48 Points)	ANAT2020	Fundamentals of Health and Disease III (72 Points)	FAMH3002
	Chemistry (36 Points)	CHEM1048	Fundamentals of Health and Disease II (24 Points)	FAMH2004	**And one of the following courses:**	
	Physics I (36 Points)	PHYS1024	Molecular Medicine II (48 Points)	HAEM2000	Human Biology III (72 Points)	ANAT3002
	Medical Thought and Practice for Pharmacy and Health Sciences (24 Points)	SCMD1003	Physiology and Medical Biochemistry II (48 Points)	PHSL2004	Medical Cell Biology III (72 Points)	ANAT3011
	Sociological Foundations of Health (18 Points)	SOCL1016			Applied Anatomy III (72 Points)	ANAT3029
	Basic Principles of Group and Individual Psychology I (18 Points)	PSYC1004			Molecular Medicine III (72 Points)	HAEM3002
					Physiology III (72 Points)	PHSL3006
					Pharmacology III (72 Points)	PHAR3004

Bachelor of Clinical Medical Practice

The aim of the programme is to develop a new group of healthcare workers (Clinical Associates) who will have the necessary knowledge, attitudes and psychomotor skills to be able to assist doctors and health care team members in district hospitals so as to improve patient care especially in rural and disadvantaged communities.

The qualified Clinical Associate will be expected to:

- Assist with the assessment and management of emergencies in casualty or ward situations for children and adults, for all conditions likely to occur in a district hospital
- Take responsibility for performing routine procedures in district hospital wards, casualty and the outpatient departments under supervision
- Form an essential part of the health care team in areas of need.

The Clinical Associate will be a proud, independent member of the medical team with unique skills and knowledge. The Clinical Associate will be taught mainly at district hospitals with some training at other hospitals and Wits Medical School. The Clinical Associate curriculum is based on the principle of developing a sound knowledge of the medical and clinical sciences to enable understanding of conditions and management strategies. Students will be expected to have a detailed knowledge of the biomedical sciences in areas related to the performance of procedures. It is a three year full-time programme resulting in a degree qualification.

CLINICAL MEDICAL PRACTICE						
PROGRAMME	**1ST YEAR CURRICULUM**	**CODE**	**2ND YEAR CURRICULUM**	**CODE**	**3RD YEAR CURRICULUM**	**CODE**
Bachelor of Clinical Medical Practice (MB001)	Fundamentals of Medical and Clinical Science (144 Points)	SCMD1001	Fundamentals of Clinical Medical Practice (144 Points)	SCMD2001	Applied Clinical and Medical Practice (144 Points)	SCMD3003

Bachelor of Dental Science

DENTAL SCIENCE

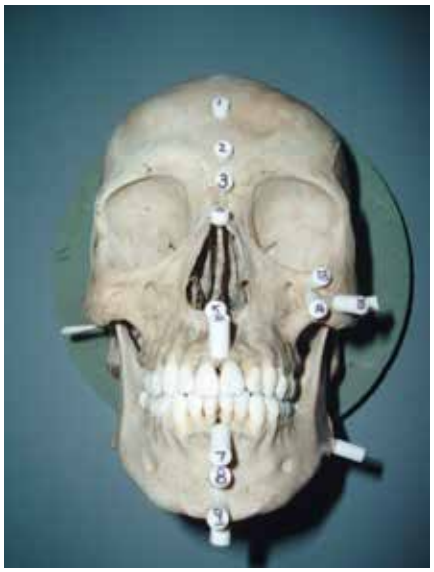
PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Dental Science (MF005)	Bioethics, Health Law and Human Rights I (3 Points)	FAMH1000	Integrated Learning I (6 Points)	OHSC2001	Pharmacology (6 Points)	PHAR3005
	Oral Microbiology I (9 Points)	OPAT1001	Prosthodontics II (36 Points)	PROD2000	Maxillo-Facial and Oral Radiology I (12 Points)	ORMP3000
	Prosthodontics I (9 Points)	PROD1001	Public Oral Health II (3 Points)	COMD2002	Emergency Medicine (24 Points)	FAMH3001
	Public Oral Health I (9 Points)	COMD1000	Bioethics, Health Law and Human Rights II (3 Points)	FAMH2005	Public Oral Health III (6 Points)	COMD3001
	Dental Materials for Dental Students I (9 Points)	OHSC1001	Dental Materials for Dental Students II (3 Points)	OHSC2002	Prosthodontics III (48 Points)	PROD3000
	Operative Dentistry (15 Points)	OHSC1004	Dental Practice Management I (3 Points)	OHSC2003	Introduction to Maxillo-Facial and Oral Surgery (6 Points)	SURG3001
	Anatomy for Dental Students (48 Points)	ANAT2030	Maxillo-Facial and Oral Radiology I (3 Points)	ORMP2002	Introduction to Periodontology (3 Points)	ORMP3001
	Physiology and Medical Biochemistry I (48 Points)	PHSL2003	Endodontics I (3 Points)	OHSC2006	Integrated Learning II (3 Points)	OHSC3002
			Operative Dentistry II (3 Points)	OHSC2007	Dental Materials for Dental Students III (2 Points)	OHSC3003
			Pathology (Anatomical and Haematological) (24 Points)	ANAP3001	Dental Practice Management II (2 Points)	OHSC3004
			Oral Biology for Dental Students (24 Points)	ANAT3030	Operative Dentistry III (15 Points)	SURG3009
			Medical Microbiology (24 Points)	CMID3002	Endodontics II (15 Points)	OHSC3008
			Oral Microbiology II (9 Points)	OPAT3002	Paediatric Dentistry (15 Points)	OHSC3007
					Dento-Facial Growth and Development (12 Points)	ORTD3002
					Essentials in Orthodontic Techniques and Diagnosis (12 Points)	ORTD3001
					Oral Pathology (24 Points)	OPAT4001

4TH YEAR CURRICULUM	CODE	5TH YEAR CURRICULUM	CODE
General Medicine and Paediatrics for Dental Students (48 Points)	MEDC4003	Anaesthetics (24 Points)	ANAE5001
General Surgery (48 Points)	SURG4000	Integrated Learning IV (36 Points)	OHSC5003
Integrated Learning III (36 Points)	OHSC4002	Prosthodontics V (24 Points)	PROD5002
Prosthodontics IV (36 Points)	PROD4001	Periodontology II (6 Points)	ORMP5004
Periodontology I (3 Points)	ORMP4003	Maxillo-Facial and Oral Surgery III (24 Points)	SURG5002
Maxillo-Facial and Oral Radiology III (6 Points)	ORMP4002	Public Oral Health V (12 Points)	COMD5002
Maxillo-Facial and Oral Surgery II (24 Points)	SURG4004	Oral Medicine II (3 Points)	ORMP5006
Public Oral Health IV (6 Points)	COMD4000	Advanced Comprehensive Patient Care (9 Points)	OHSC5004
Bioethics, Health Law and Human Rights III (3 Points)	FAMH3003	Operative Dentistry (15 Points)	OHSC5007
Oral Medicine I (3 Points)	ORMP4004	Endodontics IV (15 Points)	OHSC5006
Dental Practice Management III (9 Points)	OHSC4005	Paediatric Dentistry III (15 Points)	OHSC5005
Dental Materials for Dental Students IV (9 Points)	OHSC4004	Clinical Orthodontics III (12 Points)	ORTD5003
Comprehensive Patient Care (9 Points)	OHSC4003		
Operative Dentistry IV (15 Points)	OHSC4008		
Endodontics III (15 Points)	OHSC4007		
Paediatric Dentistry II (15 Points)	OHSC4006		
Clinical Orthodontics I (12 Points)	ORTD4002		

Dentistry is a career for those with sharp and enquiring minds, who gain satisfaction in combining hand skills with mental challenge, who enjoy contact with people and who value the opportunity to place their knowledge and skill at the service of others.

Most people would describe the work of a dentist as 'looking after teeth', but modern dentistry has moved far beyond the scope of the 'drilling and filling' of the past. Management of diseases and abnormalities of the face, the jaws, the joints of the jaws and the soft tissue lining of the mouth has extended the field into a comprehensive system of care for the whole oral and facial system. Dentists are virtually 'physicians of the head and neck.'

Bachelor of Medicine and Bachelor of Surgery



Completing and MBBCh degree in the 21st Century opens the door to an enormous variety of exciting and challenging careers. Surgeons, paediatricians, pathologists, radiologists, family medicine practitioners, all start by graduating with an MBBCh.

South Africa offers great scope to medical practitioners. There is a critical need for doctors in underserved areas and it is a challenge to provide good quality preventative, diagnostic and therapeutic services in a resource-poor setting. However, the personal rewards of giving back and making a difference to the lives of so many people make the effort worthwhile. On the other hand, the country offers up-to-date facilities in both academic and private practice settings with the opportunity of being involved in research at many levels.

MEDICINE AND SURGERY

PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Medicine and Bachelor of Surgery (MF000)	Introduction to Medical Sciences I (36 Points)	APES1001	Human Anatomy (48 Points)	ANAT2020	Integrated Basic Medical and Human Sciences A (192 Points)	SCMD3000
	Chemistry 1 (36 Points)	CHEM1048	Molecular Medicine (48 Points)	HAEM2000	4th year	code
	Physics 1 (36 Points)	PHYS1024	Physiology and Medical Biochemistry I (48 Points)	PHSL2004	Integrated Basic Medical and Human Sciences B (192 Points)	SCMD4000
	Medical Thought and Practice (24 Points)	SCMD1002	Medical Thought and Practice II (24 Points)	SCMD2002	5th year	code
	Sociological Foundations of Health (18 Points)	SOCL1016			Integrated Clinical Medicine A (192 Points)	SCMD5000
	Psychological Foundations of Health (18 Points)	PSYC1008			6th year	code
					Integrated Clinical Medicine B (192 Points)	SCMD6000

Note:

There are two points of entry into MBBCh:

- first year for applicants who are currently in Grade 12, and
- third year for applicants who have completed a degree (this is the Graduate Entry Medical Programme (GEMP).

No application to second year will be considered. Those applicants who are currently studying or who have studied at a tertiary institution are advised to complete their studies and apply for admission to the GEMP.

The Graduate Entry Medical Programme (GEMP)

Do you already have a degree?

The Gemp offers an entry point to the third year of the MBBCh degree at Wits for suitably qualified graduates who are interested in becoming doctors.

The MBBCh years III,IV, V and VI comprise integrated multidisciplinary and clinical courses and, as each year of study is compulsory, no student may be admitted to the degree beyond the third year of study.

For more information, visit: www.wits.ac.za/health/gemp/

Bachelor of Nursing

Nursing is one of the health care professions that is diverse and uniquely rewarding. Nursing combines compassion, knowledge and sophisticated health technology to achieve its goals: to restore, maintain and promote the health of individuals, groups or communities.

Nursing is a science and an art: The science component is the development and application of nursing knowledge and techniques. The art of nursing is the establishment of a caring, compassionate relationship through which nurses apply knowledge and skill in a discerning and ethical manner.

Wits nurses study in a rigorous, vibrant multidisciplinary environment that stimulates intellectual inquiry and professional responsiveness. Small group learning is the main teaching / learning strategy- students engage in cooperative learning to systematically work through carefully constructed real-life health scenarios, deciding what learning is needed to access information, discerning which information produces the best evidence into the management of health issues.

Nurses practice in a range of contexts and health care settings, some of these include: hospitals, community clinics, industry, the military, private practice, homes in specialised areas such as hospice, rehabilitation and aged care facilities.

Opportunities for further study in Nursing are also available at Wits.

NURSING

PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Nursing (MF001)	Introduction to Medical Sciences (18 Points)	APES1000	Anatomy for Nursing Students (48 Points)	ANAT2005	Microbiology (24 Points)	CMID2000
	Chemistry I (18 Points)	CHEM1028	Comprehensive Nursing II (48 Points)	NRSE2000	Comprehensive Nursing III (48 Points)	NRSE3000
	Comprehensive Nursing I (36 Points)	NRSE1000	Physiology and Medical Biochemistry (48 Points)	PHSL2003	Women's Health I (48 Points)	NRSE3001
	Physics I (18 Points)	PHYS1008			Psycho-Social Health I (48 Points)	NRSE3002
	Introduction to Psychology I (18 Points)	PSYC1007			Pharmacology (24 Points)	PHAR3000
	Basic Principles of Group and Individual Psychology I (18 Points)	PSYC1004			Health Psychology (24 Points)	PSYC2002
	Human Behavioural Sciences I (18 Points)	SOCL1012			Research Design and Analysis (24 Points)	PSYC2009
					4TH YEAR	**CODE**
					Comprehensive Nursing IV (48 Points)	NRSE4000
					Women's Health II (48 Points)	NRSE4001
					Psycho-Social Health II (48 Points)	NRSE4002

Bachelor of Science in Occupational Therapy

Occupational Therapy (OT) is the therapeutic use of self-care, work, education, play, leisure and social activities to increase independent function, enhance development, promote health and wellbeing and prevent disability. OT is indicated for people of any age when a person's ability to carry out their everyday activities is temporarily or permanently impaired by illness, disability, environmental limitations and developmental delay.

What do occupational therapists do?

Occupational therapists assess a person's functional capacity and then engage the person in a programme of scientifically chosen, meaningful and culturally appropriate activities to assist in maximising their functioning and wellbeing. This engagement in activity empowers the person to be as independent as possible, enhances dignity and quality of life at work/ school, at home and during recreation. Intervention may also include the adaptation of the environment to facilitate coping.

OT is practiced in a wide range of public, private and voluntary sector settings, such as, the person's home environment; schools; workplaces; health centres; supported accommodation; housing for seniors; rehabilitation centres; hospitals and forensic services.

The profession is listed as a scarce 'growth industry' in many parts of the world, and is diversifying into new avenues in South Africa partly in response to new legislation like the Labour Relations Act and the Bill of Rights.

OCCUPATIONAL THERAPY

PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Science in Occupational Therapy (MF003)	Introduction to Medical Sciences (18 Points)	APES1000	Anatomy for Physiotherapy and Occupational Therapy Students II (48 Points)	ANAT2033	Occupational Therapy III applied to Physical Conditions (48 Points)	OCCT3000
	Chemistry I (18 Points)	CHEM1028	Fundamentals of Occupational Science and Occupational Therapy II (48 Points)	OCCT2000	Occupational Therapy III applied to Psychiatric Conditions (48 Points)	OCCT3001
	Fundamentals of Occupational Science and Occupational Therapy I (36 Points)	OCCT1000	Physiology and Medical Biochemistry I (48 Points)	PHSL2003	Medicine and Surgery for Occupational Therapy (48 Points)	OCCT3002
	Physics I (18 Points)	PHYS1008			Science of Occupation II (48 Points)	OCCT3003
	Introduction to Psychology I (18 Points)	PSYC1007			Psychiatry in Relation to Occupational Therapy (48 Points)	PSMH3000
	Basic Principles of Group and Individual Psychology I (18 Points)	PSYC1004			Health Psychology (24 Points)	PSYC2002
	Human Behavioural Sciences I (18 Points)	SOCL1012			Research Design and Analysis (24 Points)	PSYC2009
	4TH YEAR	code				
	Science of Occupation III (48 Points)	OCCT4000	All students applying for the BSc in Occupational Therapy must spend time with an Occupational Therapist to gain insight into the profession. A certificate of attendance must be submitted with the application. If you have not received a certificate, please contact the Student Enrolment Centre on 011 717 1888. Students who fail to submit this certificate will not be considered for admission to the programme. Applicants are expected to spend at least 16 hours with an Occupational Therapist. First year courses are taught on the Braamfontein Campus. Fundamentals of Occupational Therapy is taught on the Wits Education Campus in Parktown.			
	Occupational Therapy as applied to Psychiatric Conditions (48 Points)	OCCT4001				
	Occupational Therapy as applied to Physical Conditions (48 Points)	OCCT4002				

Bachelor of Oral Health Sciences

The Oral Hygienist is a professional who focuses on the prevention of oral disease and maintenance of good oral hygiene.

The programme aims to address and improve the oral health needs of patients and communities by training oral hygiene professionals who will be able to deliver appropriate services in a wide range of settings - ranging from schools, private practice, academia, research, community health centres, sales and marketing, military health etc.

The candidates may be employed in the government sector, universities, private surgeries, private companies, research institutions and will be able to pursue postgraduate studies on completion of the programme.

ORAL HEALTH SCIENCES

PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Oral Health Sciences - Oral Hygiene (MB004)	Anatomy, Oral Biology and Physiology for Dental Auxiliaries (36 Points)	ANAT1002	Integrated Clinical Dentistry for Oral Hygienists (48 Points)	OHSC2004	Applied Research and Dental Practice Management for Dental Auxiliaries (38 Points)	OHSC3005
	Fundamentals of Clinical Oral Health (36 Points)	OHSC1002	Bioethics for Dental Auxiliaries I (12 Points)	SCMD1004	Bioethics for Dental Auxiliaries II (10 Points)	SCMD2003
	Behavioural and Social Sciences for Dental Auxiliaries (18 Points)	OHSC1003	Community Dentistry for Dental Auxiliaries (24 Points)	COMD1001	Community Dentistry for Dental Auxiliaries II (24 Points)	COMD2003
	Oral Microbiology for Dental Auxiliaries (7 Points)	OHSC1005	Fundamentals of Clinical Oral Health I (48 Points)	OHSC2005	Fundamentals of Clinical Oral Health II (76 Points)	OHSC3006
	Oral Pathology for Dental Auxiliaries (11 Points)	OPAT1004				

Bachelor of Pharmacy

Pharmacy is a dynamic, patient-oriented profession committed to fulfilling the health care needs of South Africa and its people. It is expanding in new directions, and moving away from the compounding and dispensing of medicine towards a more professional advisory and primary health care role. While pharmacists are experts in the field of manufacture, supply and use of medicines, they also provide information and advice to patients. The pharmacist is a key source of information for the public concerning:

- the prevention of disease
- the treatment of health problems that fall within their field of training
- health and emergency care
- education, promotion and maintenance of the general health of the public.

Opportunities in pharmacy

The pharmacy degree provides training in a wide range of inter-related disciplines and therefore offers a variety of career opportunities to graduates. These may include community pharmacy, hospital pharmacy, industrial pharmacy, managed health care, a growing area of pharmacy and others such as working for professional bodies - Medicines Control Council, publishing of pharmaceutical publications, Drug abuse counselling, pharmacoeconomics or Poison Information Centre.

PHARMACY

PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Pharmacy (MF004)	Introduction to Medical Sciences (18 Points)	APES1000	Anatomy for Pharmacy Students (48 Points)	ANAT2031	Pathology (24 Points)	ANAP2000
	Chemistry I (36 Points)	CHEM1048	Physiology and Medical Biochemistry I (48 Points)	PHSL2003	Medical Microbiology (24 Points)	CMID2001
	Physics I (18 Points)	PHYS1008	Pharmaceutical Chemistry I (48 Points)	PACY2000	Introduction to Biomedical Ethics (24 Points)	FAMH2002
	Medical Thought and Practice for Pharmacy and Health Sciences (36 Points)	SCMD1003	Pharmaceutics I (48 Points)	PACY2001	Pharmaceutical Chemistry II (24 Points)	PACY3000
	Sociological Foundations of Health (18 Points)	SOCL1016	Pharmacy Practice I (24 Points)	PACY2002	Pharmacotherapy I (48 Points)	PACY3001
	Pharmaceutical Practice (18 Points)	PACY1000			Pharmacy Practice II (24 Points)	PACY3002
					Pharmaceutics II (24 Points)	PACY3003
					Pharmacology I (48 Points)	PHAR3001
					4TH YEAR CURRICULUM	**CODE**
					Pharmaceutics III (48 Points)	PACY4001
					Pharmaceutical Chemistry III (24 Points)	PACY4002
					Special UG Research Projects (48 Points)	PACY4003
					Pharmacotherapy II (48 Points)	PACY4006
					Pharmacy Practice III (24 Points)	PACY4007
					Pharmacology II (24 Points)	PHAR4003

Bachelor of Science in Physiotherapy

Physiotherapy forms part of the health care profession and practitioners often work as part of a multidisciplinary team when treating patients. As first line practitioners, patients are able to come to you with their health needs without being referred by a doctor.

Physiotherapists aim to better patients' quality of life through improving their ability to carry out activities of daily living. It further aims to restore human functional ability, maintain mobility, strength and endurance.

This degree enables you to work in hospitals, clinics, private practice, schools for children with disabilities, as well as in sports with sports teams or individuals.

The field of physiotherapy is vast, encompassing six different areas, namely: Cardiopulmonary; Orthopaedic; Neuromuscular-skeletal; Paediatrics; Neurology and Community health.

Sport Physiotherapy is a specialised branch of physiotherapy which deals with injuries and health of the sports person. This is to help sports persons recover from injuries, conduct research to better understand sport injuries prevention, assessment, treatment and rehabilitation.

PHYSIOTHERAPY

PROGRAMME	1ST YEAR CURRICULUM	CODE	2ND YEAR CURRICULUM	CODE	3RD YEAR CURRICULUM	CODE
Bachelor of Science in Physiotherapy (MF002)	Introduction to Medical Sciences (18 Points)	APES1000	Anatomy for Physiotherapy and Occupational Therapy Students (48 Points)	ANAT2033	Pharmacology (24 Points)	PHAR3002
	Chemistry I (18 Points)	CHEM1029	Physiotherapy I (48 Points)	PHST2000	Physiotherapy II (24 Points)	PHST3000
	Introduction to Physiotherapy I (36 Points)	PHST1000	Physiology and Medical Biochemistry (48 Points)	PHSL2003	Rehabilitation I (24 Points)	PHST3001
	Physics I (18 Points)	PHYS1009			Clinical Physiotherapy I (48 Points)	PHST3002
	Introduction to Psychology I (18 Points)	PSYC1007			General Medicine and Surgery (24 Points)	PHST3003
	Basic Principles of Group and Individual Psychology I (18 Points)	PSYC1004			Research Methodology Part I (24 Points)	PHST3004
	Human Behavioural Sciences I (18 Points)	SOCL1012	All students applying for the BSc in Physiotherapy must spend time with a Physiotherapist to gain insight into the profession. A certificate of attendance must be submitted with the application. If you have not received a certificate, please contact the Student Enrolment Centre on 011 717 1888. Students who fail to submit this certificate will not be considered for admission to the programme. Applicants are expected to spend at least 16 hours with a Physiotherapist. First year courses are taught on the Braamfontein Campus. Introduction to Physiotherapy I is taught on the Wits Education Campus in Parktown.			
	4TH YEAR CURRICULUM	**CODE**				
	Management for Therapists (12 Points)	PHST2001				
	Physiotherapy III (18 Points)	PHST4000				
	Rehabilitation II (48 Points)	PHST4001				
	Clinical Physiotherapy II (72 Points)	PHST4002				
	Research Methodology Part II (18 Points)	PHST4004				

COURSES

In all the degrees offered in the Faculty of Health Sciences, most of the curricula for each year of study are fixed. Course selection where choice is available, is made at enrolment. It is important that you think carefully about the optional courses you wish to enrol for.

CHEMISTRY

The syllabus for the full course is similar to that of Chemistry I offered in the Faculty of Science; thus a pass in this course may be used as a credit towards a BSc degree by students who decide to change faculties. The half-course cannot be used as a credit in the Faculty of Science. The full course involves three to four lectures and one tutorial period per week, plus twelve practical sessions spaced at approximately two-week intervals throughout the academic year. The half-course has approximately half the number of lectures, tutorials and practicals.

The full course covers: the language of chemistry, stoichiometry, kinetic molecular theory, simple models of structure and bonding, quantum theory in relation to atomic and molecular structure, the periodic table, equilibrium and thermodynamics, kinetics, electrochemistry, aqueous solutions and aspects of organic and inorganic chemistry. Laboratory work involves the preparation of substances and the determination of their composition, structure and behaviour.

CLINICAL DENTISTRY

An introduction to the different disciplines of dentistry and cardiology. Students learn basic restorative and prosthetic techniques and relevant materials science. Students also commence clinical experience in preventative dentistry.

COMPREHENSIVE NURSING

Introduction to concepts of health, wellness and illness, in relation to the individual family and community; introduction to professional practice including caring, rights, values and beliefs; aspects of transcultural care including interpersonal relationships, communication and lifestyle; introduction to research; first aid and clinical skills related to the above.

HUMAN BEHAVIOURAL SCIENCES (HBS)

The HBS course is concerned with the integration and application of the social sciences in the health environment. Among health workers there is an ever-increasing awareness that the biological aspects of health and disease are integrally related to social, psychological, economic, cultural and political factors. The aim of this course is to sensitise students to these broader aspects of health and to lay the foundation for an understanding of holistic health care.

INTRODUCTION TO MEDICAL SCIENCES

Introduction to medical sciences places man in his environment and explores man and his relationship to his environment. The course is designed to form a basis for the study of human health and disease.

Topics covered include: basic classification; the evolution of early life; cell and molecular biology of living organisms through functional anatomy, to evolution, genetics, parasitology and ecology. As we construct an organism from its component parts, the emphasis is on the interrelatedness of the living world and the body systems that we all share.

MEDICAL THOUGHT AND PRACTICE I

The course comprises two separate components:

- System Dynamics in Health, and
- Critical Thinking and Learning Skills for Health Sciences

System Dynamics in Health aims at giving the student a firm foundation in systems thinking and analysis. The course takes students through the concept of systems and how they function with different data and variables and develops the capacity to handle all manner of problems encountered by the health professional namely, biological, chemical, physical pathological, social, administrative and economic, in the context of a systems approach. As such, the students will recognise the common features of these disciplines and the ways in which they are intersected. The course will use system simulation software and have allotted laboratory time for that.

Critical Thinking and Learning Skills for Health Sciences is made up of a number of related outcomes. Students will learn the principles of logic and apply them to verbal reasoning and critical analysis and arguments; English language skills such as reading, writing and presentation; the Latin and Greek foundations of English medical science terminology, and basic study skills. This integration of the English language, ethics, argumentation, formal logic and an awareness of the ways in which words can be used to project ideologies facilitates effective learning strategies. In addition, students will receive regular inputs from health professionals to illustrate how the learning in the Health Sciences degrees relate to the practice of medicine. Finally, students working in groups will be given assignments in which they have to illustrate their ability to integrate the content of different courses of the overall health sciences degrees.

In both components, real life examples from all disciplines, but mainly medicine will be drawn upon during the course. The examples will be derived from physiology, pharmacology, molecular medicine, clinical medicine, public health, epidemiology and socio-economic aspects of health care.

OCCUPATIONAL THERAPY

This course comprises:

- Preparations for problem-based learning, communication, teaching and study skills.
- **Science of occupation**: the study of occupations carried out in personal, social, work and leisure spheres of life; the introduction of research into occupations.
- **Occupational therapy:** philosophy, process and practice of occupational therapy; roles of the occupational therapist and use of activities as treatment.

COURSES

PHYSICS

The full course is a transferable credit recognised by the Faculty of Science, while the half course is offered only to students registered in the Faculty of Health Sciences. The objective of both courses is the understanding of the principles of physics and the application of these principles in the medical field.

Examples and tutorial problems are chosen to illustrate the importance of physics in the study of anatomy and physiology.

Topics covered include the following:

- classical mechanics
- fluid mechanics
- waves and optics
- thermal physics
- electricity and electromagnetism
- atomic and nuclear physics

The full course treats these topics in considerably more detail than the half-course. Modern medicine increasingly utilises sophisticated instrumentation, e.g. CAT scanners and MR imagers. The underlying principles of many of these instruments are treated in the full course.

The associated laboratory courses have three main objectives:

- an introduction to the experimental (scientific) method
- an introduction to instrumentation
- the illustration of lecture material

In the full course students carry out 10 experiments in a variety of fields while in the half-course students do half this number.

PHYSIOTHERAPY

The main focus of this course is an introduction to physiotherapy practice and learning of the basic therapeutic techniques and skills.
The course covers four main areas: professional practice, respiratory therapy, neurology rehabilitation and soft tissue management.
Some of the topics in these areas include: professional code of ethics, postural drainage, breathing exercises and manual chest therapy, passive movements, bed mobility and wheelchair activities, hot and cold therapy, massage and crutch walking.

PSYCHOLOGY

The main focus of these courses is the application of the principles of psychology in the health sciences.

The courses cover four main areas:

- introduction to psychology
- psychology of the individual
- human development
- psychology and health

Some of the topics in these areas include: intelligence and mental abilities; social psychology; physiology and behaviour; sensation and perception; personality and abnormal behaviour; stress and health psychology.

PSYCHOLOGICAL FOUNDATIONS OF HEALTH

This full semester course introduces students to theoretical and practical topics in human development, behaviour and personality traits that influence the well-being of individuals. The course will provide a broad introduction to the field of psychology and the systematic and scientific study of human behaviour, the underlying theories and the application of knowledge of psychology. The main focus of the course will be the application of introductory principles of psychology for the Health Sciences. The teaching of this course will be closely integrated with sociology using methods which include formal lectures, tutorials, practicals and field trips.

PHARMACEUTICAL PRACTICE

The South African Pharmacy Council recommended the introduction of a professional course for Pharmacy students in their first year of study. Pharmaceutical Practice is therefore an introductory course for Pharmacy students in order to equip them with a fundamental understanding and sound background knowledge to basic Pharmacy principles, including:

- calculations
- legislation
- pharmacy practice
- pharmaceutics

These important concepts will be enhanced further in later years of study.

SOCIOLOGICAL FOUNDATIONS OF HEALTH

This is an independent half course taught from an applied sociological perspective that has been especially tailored to the needs of future medical practitioners. The course introduces the MBBCh, Pharmacy and BHSc student to the multi-factoral causation of health and disease, and the role that the broader social environment plays in determining, shaping and intervening in health and disease in South Africa. With content including the social context of health and disease, sexuality and HIV and AIDS, the course lays the foundation for the bio-psychological perspective and to provide the basis for which the spiral curriculum can take root with direct linkages to the community doctor, public health and bio-ethics offerings of the GEMP programme. Through the use of sociological perspectives and insights as applied to very concrete practical and contemporary health-care issues, course objectives will be met.

Careers you can pursue with a degree in Health Sciences from Wits

Dentistry

(BDS) (5 years)

Are you good with working with your hands and interacting with people?

Consider Dentistry as a career!

What a dentist does?

Looking after teeth and the management of diseases and abnormalities of the face, the jaws, and joints of the jaws and the soft tissue lining of the mouth - a comprehensive system of care for the whole oral and facial system – Dentists are virtually 'physicians of the head and neck'.

Nursing

(BNurs) (4 years)

Well-balanced, empathetic, determined and shows initiative

A registered nurse can specialise in:

- Community health
- Intensive care nursing
- Paediatric (child) nursing
- Operating theatre nursing
- Nursing administration and teaching

Physiotherapy

(BSc Physio) (4 years)

Calm, assured, patient, shows initiative - a good communicator and physically fit

Physiotherapy is a health care profession that is primarily involved in physical rehabilitation and optimisation of the human body. It is a very hands-on and active career, where massage and manipulation techniques are used to improve the lives of patients. Unlike most health care professionals, physiotherapists develop lasting relationships with their patients, because rehabilitation can take weeks and even years to complete.

Oral Health

(BOHSc) (3 years)

Opportunities exist in Oral Health for:

- Dental assistants
- Dental hygienists
- Dental lab technicians

Occupational Therapy

(BSc OT) (4 years)

The ability to form good working relationships with a wide variety of people

Occupational Therapy (OT) is the therapeutic use of work, education, play, leisure and social activities to increase independent function, enhance development, promote health and well-being and prevent disability.

Occupational therapists work in:

- Hospitals and rehabilitation units
- Community health centres
- Home care services
- Aged care facilities
- Psychiatric clinics
- Vocational rehabilitation centres
- Schools and education facilities
- Independent living and respite centres and private practice

THE WITS CAREER PLANNER

Designed to help you find out about the many career choices available to you.

www.wits.ac.za/careerplanner

www.wits.ac.za/health/

Clinical Medical Practice

(BCMP) (3 years)

Able to work as a member of a medical team working under the supervision of a doctor

BCMP Degree will allow you to assist in medical situations as follows:

- Management of emergencies in casualties or ward situations
- Perform routine procedures in district wards, casualty and out-patient departments under supervision
- Form part of a health care team in areas of need.

Medicine & Surgery

(MBBCh) (6 years)

Warm, patient, understanding and trustworthy - capable of efficient decision-making. Strong communication skills.

Examination and diagnosis of patients, the prescription of medicines, performing of minor operations and the provision of treatments for injuries, diseases and other ailments.

This course is the standard qualification for becoming a medical practitioner. Once qualified, it is a requirement that two years internship and one further year community service must be under-taken before the qualified doctor is permitted to pursue specialty training.

Career specialisations after acquiring an MBBCh Degree:

- Anaesthesiology • Clinical microbiology & Infectious disease
- Community health • Family medicine • Forensic medicine
- Internal medicine • Obstetrics & gynaecology • Ophthalmology
- Pathology • Paediatrics • Psychiatry • Radiology • Surgery

Once qualified, it is mandatory for many of the Health Sciences candidates to undertake a year of internship and/or community service.

Pharmacy

(BPharm) (4 years)

Trustworthy - responsible for the adequate administration, preparation and dispensing of drugs

Specialise in:

- Sales & marketing
- Product management
- Clinical research
- Quality assurance control
- Research & development
- Regulatory affairs management
- Clinical research

Bachelor of Health Science Degree

(BHSc)

The BHSc is an ENTRY LEVEL DEGREE offered to those who have an interest in a range of health related fields.

Biomedical Track (3 years)

- Lecturer
- Researcher
- Science journalist/writer
- Medical sales representative

Biokinetics Track (3 years)

Biokineticists offer specialised exercise rehabilitation for persons with orthopaedic injuries, sports injuries and chronic diseases.

Opportunities in:

- Private practice
- Sports institutions
- Large companies
- Military