

MEDICAL SCIENCES

MEDIESE WETENSKAPPE

WHAT IS BSc (Medical Science)?

It is the study of basic medical sciences such as Anatomy and Physiology with a view to research, laboratory work and the academic world. BSc Medical Science provides a broad base in a variety of fields within the basic medical sciences. There is ample opportunity for practical experience.

SCHOOL SUBJECTS

Mathematics and Physical Science are compulsory for admission to the BSc Medical Sciences degree.

DURATION OF COURSE

The three-year course provides a broad background, and it is strongly recommended that students should thereafter obtain at least an honours degree in order to establish themselves in a specific field.

SELECTION REQUIREMENTS

In order to obtain admission to the course you have to apply for selection. Requirements differ from university to university. The following requirements serve as a guideline:

- Matriculation Exemption Certificate
- Mathematics minimum D symbol
- Physical Science minimum D symbol
- M score or Symbol-score
- Passing admission test where applicable.

The admission of candidates is provisional until your final matric results have been received. Selection is forfeited if the required M score or Symbol score and D symbols for Mathematics and Physical Science are not obtained in the final matric examination.

CAREER OPPORTUNITIES

As in the case with most BSc degrees, this degree as such does not qualify you for a professional career. Although there are career opportunities with only a BSc (Medical Science) degree, you are advised to continue your studies (honours and/or MSc) after obtaining this degree in order to prepare yourself for a specific career. Possible career opportunities with this degree are indicated below:

FORENSIC SCIENCES

The Forensic Sciences Laboratory accepts BSc (Medical Science) graduates. Candidates then receive further in-house training, especially with a view to advanced laboratory techniques (e.g. DNA extraction and interpretation, and PCR techniques). This career is based mostly on laboratory work, which includes DNA matching of suspect persons, semen analyses, disputed paternity issues, etc.

WAT IS BSc (Mediese Wetenskappe)?

Dis die studie van mediese wetenskappe soos Anatomie en Fisiologie, met die oog op navorsing, laboratoriumwerk of die akademie. BSc Mediese Wetenskappe bied 'n breë veld in verskeidenheid rigtings binne die basiese mediese wetenskappe. Daar is geleentede vir praktiese ondervinding.

SKOOLVAKKE

Wiskunde en Natuur- en Skeikunde is verpligte vakke vir toelating tot die BSc Mediese Wetenskappe.

DUUR VAN KURSUS

Die kursus van drie jaar verskaf 'n breë agtergrond, en daar word sterk aanbeveel dat studente daarna minstens 'n honneursgraad moet voltooi ten einde hulself in 'n bepaalde veld te vestig.

KEURINGSVEREISTES

Om toelating tot die kursus te verkry, moet aansoek gedoen word vir keuring. Keuringsvereistes verskil van universiteit tot universiteit. Die volgende dien as 'n gids:

- Matrikulasievrystellingsertifikaat
- Wiskunde minimum D-simbool
- Natuur- en Skeikunde minimum D-simbool
- M-telling of simbooltelling
- Die slaag van 'n toelatingstoets, waar van toepassing.

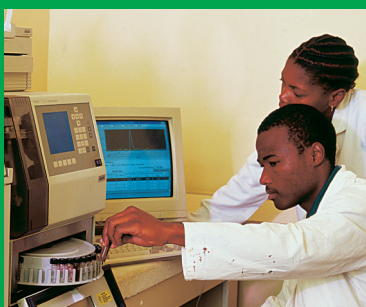
Kandidate se toelating is voorlopig totdat die finale matriekuitslae ontvang is. Keuring word verbeur indien die vereiste M-telling of simbooltelling en minimum simbole vir Wiskunde en Wetenskap nie in die finale matriekeksamen behaal word nie.

BEROEPSGELEENTHEDE

Soos in die geval met die meeste BSc-grade is, kwalifiseer hierdie graad jou nie vir 'n professionele loopbaan nie. Ofskoon daar wel beroepsgeleentede met slegs die BSc (Mediese Wetenskappe) graad bestaan, word daar aanbeveel dat jy nà hierdie graad, verder studeer (honneurs en/of MSc) om jou vir 'n loopbaan voor te berei. Moontlikhede vir loopbane met hierdie graad en verdere nagraadse studie word hieronder aangedui:

FORENSIESE WETENSKAPPE

Die Laboratorium vir Forensiese Wetenskappe aanvaar BSc (Mediese Wetenskappe) gegradueerdes. Hulle lei die kandidate dan self verder op, veral met die oog op gevorderde laboratoriumtegnieke (bv. DNA-ekstraksie en -interpretasie, en PCR-tegnieke). Hierdie loopbaan behels meestal laboratoriumwerk, wat bv. DNA-ooreenstemmings van verdagte persone, semenanalises, betwiste vaderskapkwessies, ens insluit.



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ACADEMIC CAREER

Some universities accept candidates with only a BSc degree as junior lecturers, who will then, for example, serve as supervisors at dissections (e.g. University of the Witwatersrand). For a career as a fully-fledged academic you require a Master's or higher degree, which may be obtained in any of the fields of specialisation.

RESEARCH

Pure research posts are sometimes very scarce, but organisations such as the Medical Research Council or museums have posts for research assistants. Further possibilities that may be considered include postgraduate study in Immunology. This MSc is also aimed at a career in research. Postgraduate qualifications will considerably improve your chances of obtaining employment.

ERGONOMY

Ergonomy deals with the design of equipment and work environments to render them suitable and safe for the persons using them. The physical dimensions, anatomy, physiology and capabilities of people are taken into account. To specialise as ergonomist, a postgraduate qualification is a requirement. BSc (Medical Science) is a suitable undergraduate qualification.

PHARMACOLOGY

Career opportunities for students with a BSc (Hons) degree in Pharmacology vary and include a considerable number of posts in the pharmaceutical industry, such as pharmaceutical representatives, laboratory assistants and researchers.

CHEMICAL PATHOLOGY

An honours degree in Chemical Pathology concentrates on laboratory skills and pathophysiology. A BSc degree (such as Medical Science) is a requirement for this degree.

SPORTS SCIENCES

The MSc (Medical Science) degree can give access to a career in Sports Sciences. Special admission has to be obtained.

TECHNICAL CAREER

With the BSc (Medical Science) degree you may apply for a post as technical assistant in anatomy and physiology departments at any university in the country. Technical assistants render assistance during practical and training sessions and also with research.

AKADEMIESE LOOPBAAN

Sommige universiteite aanvaar kandidate met slegs 'n BSc-graad as junior lektor, wat dan bv. diens verrig as 'tafeldokter' by disseksies (bv. Universiteit van die Witwatersrand). Vir 'n loopbaan as volwaardige akademikus moet jy oor 'n M- of hoër graad beskik, wat in enige van die spesialiseringstudies verwerf kan word.

NAVORSING

Suiwer navorsingsposte is soms skaars, maar instansies soos die MNR of museums het poste vir navorsingsassistent. Verdere moontlikhede wat oorweeg kan word, is nagraadse studie in bv. immunologie. Hierdie MSc is ook gerig op navorsing. In enige navorsingsrigting moet daar in gedagte gehou word dat nagraadse kwalifikasies jou kanse op 'n betrekking aansienlik verbeter.

ERGONOMIE

Ergonomie behels die ontwerp van toerusting en werkomgewings wat geskik en veilig is vir persone wat dit gebruik. Die fisiese afmetings, anatomie, fisiologie, en vermoëns van mense word hiervoor in ag geneem. Om as ergonoom te spesialiseer, is 'n nagraadse kwalifikasie 'n vereiste. Die BSc (Mediese Wetenskap) graad is 'n gepaste voorgraadse kwalifikasie vir hierdie studierigting.

FARMAKOLOGIE

Die loopbaangeleenthede vir studente met 'n BSc (Honneurs) in Farmakologie wissel en sluit 'n hele aantal poste in die farmaseutiese bedryf in, byvoorbeeld verteenwoordigers, laboratoriumassistent en navorsers.

CHEMIESE PATALOGIE

'n Honneursgraad in Chemiese Patologie konsentreer op laboratoriumvaardighede en patofisiologie. Hiervoor is 'n BSc-graad, byvoorbeeld BSc (Mediese Wetenskappe) 'n voorvereiste.

SPORTWETENSKAPPE

Die BSc (Mediese Wetenskappe) graad kan toegang verleen tot 'n loopbaan in Sportwetenskappe. Hiervoor moet spesiale toelating verkry word.

TEGNEIESE LOOPBAAN

Met die BSc (Mediese Wetenskappe) graad kan jy aansoek doen vir 'n pos as tegniese assistent in bv. anatomie- en fisiologiedepartemente by enige universiteit in die land. Tegniese assistente verleen hulp tydens praktiese en opleidingsessies en help ook met navorsing.

