

5.3.2.3 MSc in Bioinformatics and Computational Biology

This programme is offered as a multidisciplinary programme within the Faculties of AgriSciences, Medicine and Health Sciences, and Science. You enrol in the faculty where your research focus and supervisor(s) are situated and will graduate with the degree from that faculty.

Specific Admission Requirements

- One of the following qualifications:
 - A BScHons degree in Bioinformatics and Computational Biology, Biochemistry, Genetics, or Molecular Biology;
 - An applicable BScHons degree in a biological field;
 - A BScHons degree in Computer Science, Informatics, Mathematics, Applied Mathematics or Statistics;
 - An applicable BScHons degree in a Mathematics-related field; or
 - Any other academic degree qualification and appropriate experience (assessed using the regular RPL procedures) approved by the Senate
- Depending on your previous training and experience, the Postgraduate Committee of the Division of Molecular Biology and Human Genetics may prescribe additional studies.

Programme Content

Independent research on an approved topic as determined by the supervisor(s) and leading to a thesis is required. This programme consists of a 100% thesis.

Compulsory Module

Thesis: Bioinformatics and Computational Biology	818(180)
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Assessment and Examination

After completion of the research you must submit a thesis for examination to the satisfaction of the appointed examiners and do an oral examination.

Enquiries

Programme leader: Prof H Patterton

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5.3.2 Master of Science

General admission and selection requirements for MSc programmes

- For admission to the MSc degree programmes, you must have an honours degree in Science of this University, or another honours degree approved for such purposes by Senate, or you must otherwise have attained a standard of competence deemed adequate for such purpose by Senate.
- The initial research proposal is approved by a departmental research committee, as well as by the Health Research Ethics Committee of the Faculty of Medicine and Health Sciences. In instances where research is conducted on animals, the proposal is approved by the Committee for Experimental Animal Research of the Faculty.

Programme description

Thesis MSc programmes entail an independent research project, resulting in a thesis that constitutes 100% of the final mark of the programme. The subject of the research project is selected to support the Faculty's research focus areas.

The following overarching objectives are set for the MSc programmes:

- to equip you with more advanced knowledge and a deeper insight into your chosen subject within the field of study;
- to promote mastery of the chosen topic, with the aid of higher levels of analysis of new information, and to develop the ability to handle complexities and to find solutions to such problems;
- to enable you to do advanced and independent research by means of rigorous training in research methods and to familiarise you with the skills needed for academic communication;
- to prepare you, if you are aspiring to higher levels of academic research work, for doctoral study and to foster an approach marked by academic integrity and ethics;
- to contribute to the pool of academics and professionals through the development of capabilities and critical intellectual skills aimed at ensuring the healthy continuance of the relevant discipline or profession; and
- to prepare you to utilise your skills to help solve the problems and challenges of the country that fall within the scope of your particular field.

Disclaimer:

The content above comes from the 2024 Medicine and Health Sciences Yearbook. Make sure to consult the full **Medicine and Health Sciences Yearbook** to see this extract in context and to check if there have been any changes. Take special note of additional information in the yearbook under section *Postgraduate programmes*.