

4.4 Interdisciplinary BSc programme

4.4.1 Stream: Biomedical Mathematical Sciences

Please note: The first first-year students for this programme will be registered in 2020.

Specific Admission Requirements

- Afrikaans or English (Home Language or First Additional Language) – 4
- Mathematics – 6
- Physical Sciences – 4

Continued Study Possibilities

- This stream leads to an honours programme in Mathematics or Physiological Sciences.
- This stream also leads to a postgraduate diploma in Biomedical Engineering (PGDip Biomedical Eng)*, which could further lead to a master's programme (MEngSci)* and a PhD (Biomedical Engineering)* in the Faculty of Engineering.

Please note: *on condition that these programmes are accredited by the South African Qualifications Authority (SAQA).

For more information on admission to the honours programme you are considering, please consult the relevant honours programme's details in the chapter "Postgraduate Programmes" of the relevant Faculty Calendar part.

1st year (140 credits) (2020 onward)

Compulsory Modules

Applied Mathematics	144(16)
Biology	124(16)
Chemistry	124(16), 144(16)
Computer Science	114(16), 144(16)
Mathematics	114(16), 144(16)
Science in Context	178(12)

2nd year (minimum 133, maximum 144 credits) (2021 onward)

Compulsory Modules

(credits = 112)

Biochemistry	214(16), 244(16)
Biometry	212(8), 242(8)
Physiology	214(16), 244(16)
Mathematics	214(16), 244(16)

plus

Elective Modules

(credits = minimum 16, maximum 32)

Choose one or two modules from the list below.

Applied Mathematics	214(16), 244(16)
Computer Science	214(16), 244(16)
Mathematics	278(32)

3rd year (128 credits) (2022 onward)

Compulsory Modules

(credits = 80)

Physiology	314(16), 334(16), 344(16), 364(16)
Biomathematics	374(16)

plus

Elective Modules

(credits = 48)

Choose modules to the value of 48 credits from the list below.

Applied Mathematics	324(16), 354(16)
Mathematics	314(16), 324(16), 344(16), 365(16), 378(32)

Interdisciplinary BSc degree_ as from 2020

4.4.2 Stream: Applied Medicinal Chemistry

Please note: The first first-year students for this programme will be registered in 2020

Specific Admission Requirements

- Afrikaans or English (Home Language or First Additional Language) – 4
- Mathematics – 6
- Physical Sciences – 4

Continued Study Possibilities

- This stream leads to an honours programme in Physiological Sciences or Chemistry.

For more information on admission to the honours programme you are considering, please consult the relevant honours programme's details in the chapter "Postgraduate Programmes" of this Calendar part.

1st year (140 credits) (2020 onward)

Compulsory Modules

Biology	124(16), 154(16)
Chemistry	124(16), 144(16)
Mathematics	114(16), 144(16)
Physics	114(16), 144(16)
Science in Context	178(12)

2nd year (144 credits) (2021 onward)

Compulsory Modules

Biochemistry	214(16), 244(16)
Biometry	212(16), 242(16)
Chemistry	214(16), 234(16), 254(16), 264(16)
Physiology	214(16), 244(16)

3rd year (128 credits) (2022 onward)

Compulsory Modules

Botany	354(16)
Chemistry	314(16), 324(16), 344(16), 364(16)
Patent Law	314(16)
Physiology	314(16), 364(16)

4.4.3 Stream: Bioinformatics and Computational Biology

Please note: The first first-year students for this programme will be registered in 2020

Specific Admission Requirements

- Afrikaans or English (Home Language or First Additional Language) – 4
- Mathematics – 6
- Physical Sciences – 4

Continued Study Possibilities

- This stream leads to an honours programme in Bioinformatics and Computational Biology.
- If applicable elective modules are taken, this stream also leads to honours programmes in Biochemistry, Computer Science, or Genetics.

For more information on admission to the honours programme you are considering, please consult the relevant honours programme's details in the chapter "Postgraduate Programmes" of this Calendar part.

1st year (140 credits) (2020 onward)

Compulsory Modules

Biology	124(16)
Chemistry	124(16), 144(16)
Computer Science	114(16), 144(16)
Mathematics	114(16), 144(16)
Probability Theory and Statistics	144(16)
Science in Context	178(12)

2nd year (128 credits) (2021 onward)*Compulsory Modules*

Biochemistry	214(16), 244(16)
Computer Science	214(16), 244(16)
Genetics	214(16), 244(16)
Mathematical Statistics	214(16), 254(16), 246(16)

3rd year (128 credits) (2022 onward)*Compulsory Modules*

Biochemistry	315(16), 345(16)
Bioinformatics	312(8), 322(8)
Computer Science	334(16), 344(16), 354(16)
Genetics	314(16), 344(16)