

BScHons in Applied Mathematics

Programme Code

20710 – 797 (128)

Specific Admission Requirements

- A BSc degree with Applied Mathematics as major or another qualification recognised as equivalent by the Senate.
- An average final mark of at least 60% for Applied Mathematics 3.

Closing Date for Applications

Apply online at <http://www0.sun.ac.za/pgstudies/> by 31 October of the previous year and submit all supporting documents where applicable. Late applications can be submitted until 30 November. In exceptional cases, if there are any places available, applications will be considered until the beginning of the academic year.

If you are not an SU student, please note that your application may take longer to process due to the verification of qualifications. Therefore, apply early.

Promotion Rules

In order to obtain this degree, you need to achieve at least 50% in every module in your programme.

If you fail a theory-based module, you may apply to repeat this module in the following year. You may apply to repeat a maximum of two modules. Admission to the relevant module(s) in the following year is solely at the discretion of the department. However, the research module cannot be repeated and if you fail it, you will not graduate with the BScHons in Applied Mathematics.

Duration of Programme

The normal duration of the programme is one year, but under exceptional circumstances and at the discretion of the department, it is possible to repeat a module. The programme begins with the start of the academic year.

Programme Content

The minimum credits required are 128. You can take some modules at other departments with the permission of the Division Applied Mathematics. The following modules are offered:

Subject Number	Module Code	Credits	Module Name	Semester
10381	781	16	Analytical methods of Applied Mathematics	1 or 2
36323	776	16	Numerical methods	1
10643	774	16	Partial Differential Equations (Students who have taken Applied Mathematics 364 are not allowed to take Partial Differential Equations 774 as well).	1

10542	782	16	Graph Theory	1 or 2
62782	784	16	Coding Theory	1 or 2
10728	794	16	Tensor Analysis	1 or 2
62820	775	16	Numerical Simulation of Fluids	1 or 2
62839	791	16	Porous media	1 or 2
62812	773	16	Numerical Modelling	1 or 2
64572	793	16	Digital Image Processing	1 or 2
62847	792	16	Computer Vision	1 or 2
62855	796	16	Statistical Pattern Recognition	1 or 2
11380	711	10	X-ray Tomography	1 or 2
12253	761	8	Capita selecta I	1 or 2
12255	762	8	Capita selecta II	1 or 2
12256	763	16	Capita selecta III	1 or 2
12257	764	16	Capita selecta IV	1 or 2
10557	772	32	Research Project in Applied Mathematics	Annual
13946	771	16	Finite Difference and Finite Element Methods	1 or 2
14233	783	16	Applied Markov Processes	1 or 2

The Research Project in Applied Mathematics is compulsory. Not all other modules will necessarily be offered every year and the Division can decide to make certain modules compulsory.

Assessment and Examination

All modules are assessed continuously. To obtain this honours degree you must achieve a final mark of at least 50% in each module, including the project.