

BSc Computer Science

Computer science is the theory and practice of algorithms. It is a wonderful combination of art (invention and design), science (analysis and experimentation), and engineering to solve problems with computers. Our students learn to program, develop, and manage large software systems in a team, but – most importantly – to frame problems in terms of computational processes.

The BSc in Computer Science programme will equip you with extensive knowledge of computer science, including programming, computer systems, databases, networks, operating systems, concurrent programming and operating systems. Take note of the three focal areas below.

Focal areas

General Computer Science (with possible second major in Applied Mathematics, Economics, General Linguistics, Mathematical Statistics, Mathematics, Music Technology, Operations Research, Statistics, Genetics or Geoinformatics).

Computer Systems

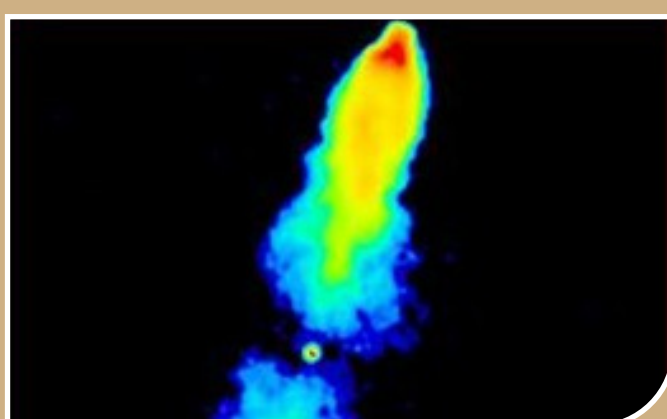
Data Science (with possible second major in Mathematical Statistics or Statistics).

Do I qualify?

Minimum admission requirements

- Average (excluding Life Orientation): **65%**
- English OR Afrikaans
(Home Language or First Additional Language): **50%**
- Maths: **70%**

TAKE NOTE: Selection requirements are used for admission. This varies and is higher than minimum admission requirements.



Focal areas explained:

General Computer Science

This focal area offers you a wide choice of subjects to combine with Computer Science. We recommend that you identify a second major subject from the list above, which also includes subjects offered by other faculties.

Data Science

Skills in data analysis and data processing are in great demand. Insights gained from these skills help organisations to make effective data-driven decisions. By taking Computer Science with modules from a selection of Data Science, Data Engineering, Mathematical Statistics and Statistics, students acquire valuable and versatile skills that will open doors to job opportunities in a variety of industries, such as health, financial services, logistics, supply chain management, consultation, and e-commerce.

Computer Science with Geographical Information Technology

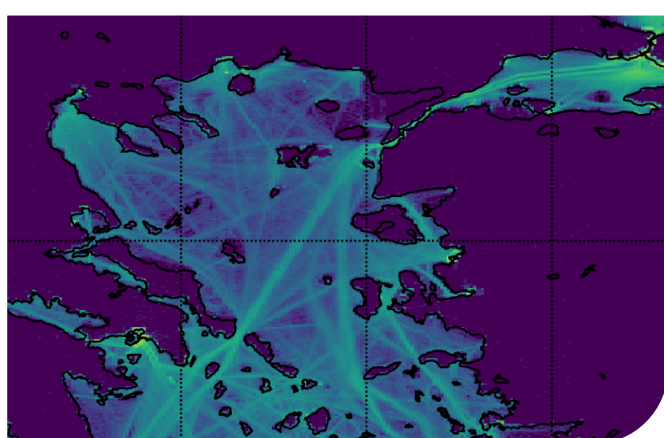
Geographical Information Technology covers geographical information systems (GIS) and remote sensing techniques for the capture and analysis of spatial information to manage and solve spatial problems caused by human-environment interaction. Equipped with such knowledge and skills, you may come in line for jobs requiring (=GIS analysis, geospatial modelling and analysis or conservation planning.

Computer Systems

If you are interested in electronics or robotics and think studying hardware systems and design would be interesting, then this is the focal area for you. This focal area combines various Electrical and Electronic Engineering subjects with a Computer Science major. In this focal area, you will develop the skills required for jobs involving low-level computer systems, such as designer or software developer for embedded systems.

Computer Science with Genetics

If you are interested in biology, then this focal area where you combine Computer Science with Genetics will hold exciting job opportunities for you. Depending on your interests, you can study further by taking an honours programme in Computer Science or Genetics.



Is BSc Computer Science for me?

Top ten reasons to study Computer Science

- Computing is part of everything we do.
- Expertise in computing enables you to solve complex, challenging problems.
- Computing enables you to make a positive difference in the world.
- Computing offers many types of lucrative careers.
- Computing jobs are here to stay, regardless of where you are located.
- Expertise in computing helps even if your primary career is something else.
- Computing offers great opportunities for true creativity and innovation.
- Computing has space for both collaborative work and individual effort.
- Computing is an essential part of well-rounded academic preparation.
- Future opportunities in computing are without boundaries.

Why study Computer Science at Stellenbosch University?

Did you know?

- The high quality of our Computer Science graduates is well-recognised by local industry, who actively recruit them.
- Our training will provide you with a strong basis in the foundations of Computer Science, combined with excellent programming and technical skills.
- Our postgraduate qualification is directly accepted at prestigious international institutions and sought after in industry.

What can I do with a BSc Computer Science degree?

AI engineer

Applications developer

Business analyst

Computer programmer

Computer systems analyst

Consultant

Data analyst

Database administrator

Data scientist

Game designer

Information security analyst

IT project manager

Software developer

Software project manager

Software tester

Systems architect

User experience designer

Contact details

Department of Computer Science

Tel: (021) 808 4232

E-mail: undergradcs@sun.ac.za

Website: <https://www.cs.sun.ac.za/>

Contact our recruitment officer

Qaqamba Mhlauli

qmhlauli@sun.ac.za or science@sun.ac.za

Deadline for applications: 31 July

General selection and application criteria

<https://www.sun.ac.za/english/maties>