Stellenbosch UNIVERSITY IYUNIVESITHI UNIVERSITEIT

Science
EyeNzululwazi ngezeNdalo
Natuurwetenskappe

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, Genetics, Geographical Information Technology, Mathematical Statistics, Mathematics, Music Technology, Operations Research, or Statistics)

Computer Systems

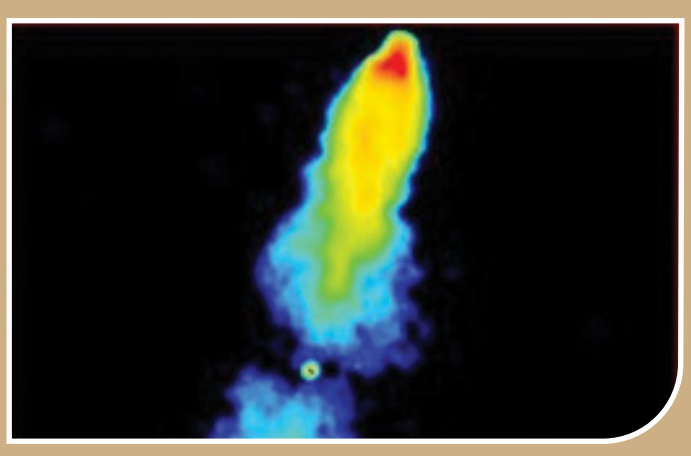
Data Science

Do I qualify?

Minimum admission requirements

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

PLEASE NOTE: Consult the latest Yearbook of the Faculty of Science (Part 5) for information about subjects, modules and specific admission requirements.



Focal areas explained:

General Computer Science

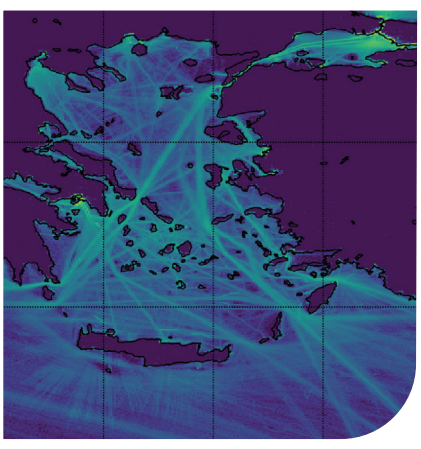
This focal area offers you a wide choice of subjects to combine with Computer Science. We recommend that you identify a second major subject from the list above, which also includes subjects offered by other faculties.

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 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.



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 everywhere, 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: www.cs.sun.ac.za

Contact our Coordinator: Student and Academic Affairs

at scienceadmin@sun.ac.za

Deadline: Apply with your grade 11 marks by 31 July

General selection and application criteria

www.su.ac.za/ugrequirements

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BSc Rekenaarwetenskap

Rekenaarwetenskap is die teorie en praktyk van algoritmes. Dit is 'n wonderlike kombinasie van kuns (uitvinding en ontwerp), wetenskap (analise en eksperimentering), en ingenieurswese om probleme met behulp van rekenaars op te los. Ons studente leer om te programmeer en om groot sagtewarestelsels in spanverband te ontwikkel en te bestuur, maar belangriker, om probleme in terme van berekeningsprosesse te konseptualiseer.
Die BSc in Rekenaarwetenskapprogram sal jou toerus met uitgebreide kennis van rekenaarwetenskap, insluitend programmering, rekenaarstelsels, databasisse, netwerke, operasionele sisteme en gelyklopende programming. Neem kennis van die drie fokusareas hieronder.

Fokusareas

Algemene Rekenaarwetenskap (met moontlike tweede hoofvak: Algemene Taalwetenskap, Ekonomie, Genetika, Geografiese Inligtingstegnologie, Toegepaste Wiskunde, Wiskundige Statistiek, Wiskunde, Musiektegnologie, Operasionele Navorsing of Statistiek).

Rekenaarstelsels

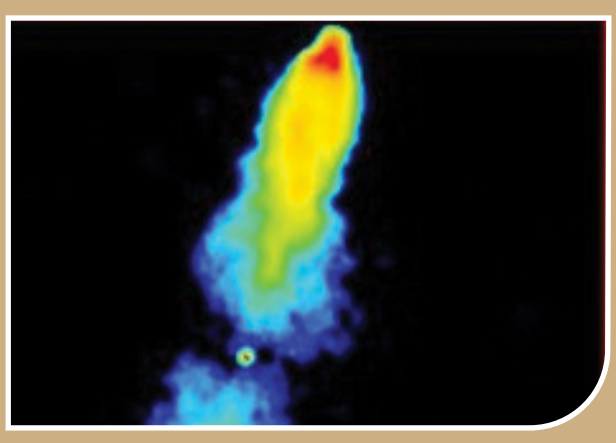
Datawetenskap

Voldoen ek aan die vereistes?

Minimum toelatingsvereistes

- NSS-gemiddeld van **65%** (Lewensoriëntering uitgesluit)
- Engels OF Afrikaans (Huistaal of Eerste Addisionele Taal): **50%**
- Wiskunde: **70%**

NEEM KENNIS: Raadpleeg die nuutste Jaarboek van die Fakulteit Natuurwetenskappe (Deel 5) vir inligting oor vakke, modules, en spesifieke toelatingsvereistes.



Fokusareas uiteengesit:

Algemene Rekenaarwetenskap

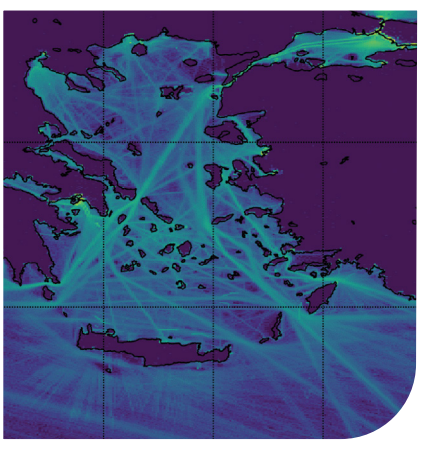
Hierdie fokusarea bied 'n wye keuse van vakke om te kombineer met Rekenaarwetenskap. Ons beveel aan dat jy 'n tweede hoofvak uit die lys hierbo kies. Dit sluit vakke in wat in ander fakulteite aangebied word.

Rekenaarstelsels

As jy in elektronika of robotika belangstel en dink die bestudering van hardeware- stelsels en -ontwerp kan interessant wees, is dit die ideale fokusarea vir jou. Hierdie fokusarea kombineer verskeie Elektriese en Elektroniese Ingenieurswese-vakke met Rekenaarwetenskap as hoofvak. In hierdie fokusarea sal jy die vaardighede ontwikkel wat nodig is vir poste wat laevlak rekenaarstelsels behels, soos byvoorbeeld as ontwerper of sagteware-ontwikkelaar vir ingebedde stelsels.

Datawetenskap

Daar is 'n groot vraag na vaardighede in data-analise en dataverwerking. Insigte wat verkry word deur middel van hierdie vaardighede help organisasies om doeltreffende datagedrewe besluite te neem. Deur Rekenaarwetenskap, in kombinasie met modules uit 'n seleksie van Datawetenskap, Data-ingenieurswese, Wiskundige Statistiek en Statistiek te neem, verkry studente waardevolle en veelsydige vaardighede wat deure sal oopmaak vir loopbane in 'n verskeidenheid industrieë, soos gesondheid, finansiële dienste, logistiek, voorsieningskettingbestuur, konsultasie, en e-handel.



Waarom BSc Rekenaarwetenskap studeer?

Top tien redes om Rekenaarwetenskap te studeer

- Berekening is deel van alles wat ons doen.
- Spesialiskennis in rekenaarwetenskap sal jou in staat stel om komplekse, uitdagende probleme op te los.
- Rekenaarwetenskap bemagtig jou om 'n positiewe verskil in die wêreld te maak.
- Rekenaarwetenskap bied geleenthede vir 'n verskeidenheid van lonende loopbane.
- Werksgeleenthede in Rekenaarwetenskap is oral, maak nie saak waar jy jou bevind nie.
- Spesialiskennis in rekenaarwetenskap is waardevol, selfs indien jou primêre loopbaan in 'n ander rigting is.
- Rekenaarwetenskap bied vele geleenthede vir werklike kreatiwiteit en innovasie.
- Rekenaarwetenskap bied ruimte vir beide samewerking en individuele pogings.
- Rekenaarvaardighede is 'n noodsaaklike deel van jou akademiese voorbereiding.
- Toekomstige geleenthede in rekenaarwetenskap is onbeperk.

Waarom BSc Rekenaarwetenskap by die Universiteit Stellenbosch studeer?

- Die hoë gehalte van ons Rekenaarwetenskap-gegradueerdes word erken deur die plaaslike industrie wat hulle aktief kom werf.
- Ons opleiding sal jou 'n stewige grondslag in die fundamentele beginsels van Rekenaarwetenskap gee, in kombinasie met uitstekende tegniese en programmeringsvaardighede.
- Ons nagraadse kwalifikasie word direk by gesogte internasionale instellings aanvaar en is gesog in die industrie.

Wat kan ek doen met BSc Rekenaarwetenskap?

Kunsmatige Intelligensie Ingenieur
Toepassingsontwikkelaar
Besigheidsanalis
Rekenaarprogrammeerder
Rekenaarstelselanalis
Konsultant
Data-analis
Databasis-administreerder
Datawetenskaplike
Rekenaarspeletjiesontwerper
Inligtingsekuriteitsanalis
IT-projekbestuurder
Sagteware-ontwikkelaar
Sagteware-projekbestuurder
Sagteware-toetser
Stelselsargitek
Gebruikerservaringontwerper

Kontak ons

Afdeling Rekenaarwetenskap
Tel: (021) 808 4232
E-pos: undergradcs@sun.ac.za
Webwerf: https://www.cs.sun.ac.za/

Kontak ons Koördineerder: Studente- en Akademiese Sake

by scienceadmin@sun.ac.za
Sperdatum: Doen aansoek met jou graad 11-punte teen 31 Julie

Algemene toelatings- en keuringskriteria

www.su.ac.za/ugrequirements