



Why choose Stellenbosch University (SU)?

For the unique vibe! As the campus extends over a large part of the town, you'll find students and friends everywhere, the atmosphere is fantastic, you get awesome student discounts, and the town is small enough that you can easily walk or cycle between your accommodation and most parts of the campus.

But this is what you tell your parents: For the great learning experience and that SU's engineering programmes are some of the best in South Africa, accredited by the Engineering Council of South Africa, and are recognised in over 20 countries through the Washington Accord, so you can potentially work overseas ... (But don't go, we need you here!)

What *subjects* do I need to get accepted?

Pure Maths and Physical Sciences are a must and count double when used in the selection formula; for the other subject requirements, check out the Engineering Yearbook on the website.



What *marks* do I need to apply?

The million-dollar question! There is a selection formula, using the marks obtained for the best six subjects (excluding Life Orientation). There are minimum marks requirements needed just to be considered and then there are suggested marks that will give you a better chance of being selected. Competition is tough and space is limited, so make sure to get your best marks. Grade 11 marks are used to get provisionally accepted, with confirmation received after your Grade 12 final results are available. The website will give you the latest selection formula (which changes from time to time).

How long does the BEng take?

4 years for the Bachelor of Engineering programmes, then master's or doctoral postgraduate degrees are options to study further.

5 years if you're from an educationally disadvantaged background; the extra year will bridge school and the first year, bringing you up to speed. Check the website for information on the extended curriculum program (ECP).



What *language* will my lectures be in?

English, with an Afrikaans option for most of the modules in the first two years. Tests and exams are available in English and in Afrikaans, and you can answer in English or in Afrikaans.

Where would I *stay*?

University residences and private residences are the most popular choices for first years. There are single sex and mixed/co-ed alternatives. Selection for university residences is based on your marks, so make sure you do your best, they're tough to get into! Other options are shared houses or apartments, garden flats or rooms in private homes. See maties.com for more info on the different university residences.



Apply When do the applications open and when do they close?

Visit www.maties.com to keep up to date with the application and closing date or scan this code:



How do students *get around* campus?



Walking and cycling are the most popular, with bicycle sheds on campus providing secure lock-up spots while you're in class. You can hire a bicycle from the University or bring your own. Student buses follow set routes according to a schedule. Or bring a car, but traffic and parking are challenging. (As an engineer, maybe you can solve this problem for us?)

What is a *Matie*?

All students at Stellenbosch University are affectionately referred to as Maties. You'll find the word used everywhere: around town, on the University website, local newspapers and of course, the Varsity Cup sports competitions!



What would I study?

All BEng first years take the same compulsory modules, no matter what programme you apply to (excluding BEng Data Engineering), as well as one programme-specific module. Because everyone studies the same modules, you can swap to a different programme at the beginning of your second year if you passed all your first-year modules. **No sweat!**

In the first two years, you'll focus on maths, basic sciences and engineering sciences; in years 3 and 4, you'll learn how to apply these to solve technical problems, and how to develop business opportunities. That's right, business opportunities. SU engineers make excellent entrepreneurs too.

Keep reading to find out more about the six different BEng programmes we offer.

1

Chemical Engineering

Think petrol and platinum, flavourants and fertilisers, antibiotics and acetylene, clean water and clean energy, biofuels and biomaterials, internet of things and machine learning.
chemeng.sun.ac.za

2

Civil Engineering

Think highways and traffic flows, dams and waterways, buildings and bridges, sports stadiums and arenas, internet of things and machine learning (yes, here too!), design and construction.
civeng.sun.ac.za

3

Electrical & Electronic Engineering

Think data, electronics, robotics, drones, satellites, cloud computing, internet of things and machine learning (and here!), telecoms, radar, antennas, renewable energy and smart grids. Data engineering is a focus area that has been added to the existing undergraduate degree in Electrical and Electronic Engineering BEng.
www.ee.sun.ac.za

4

Industrial Engineering

Think engineering meets business and finance, artificial intelligence and advanced manufacturing, internet of things and machine learning (again!), world-class quality and multi-continent enterprises.
www.ie.sun.ac.za

5

Mechanical Engineering

Think cars and trucks, aeroplanes and ships, power stations and engines, wind turbines and solar electricity, knee implants and neck braces, internet of things and machine learning (it's everywhere!).
www.mecheng.sun.ac.za

6

Mechatronic Engineering

Think robots assembling cars, autopilots, measuring submicron features, surgery assisting robots, internet of things and machine learning (yes, everywhere!), machine vision and the 4th industrial revolution.
www.mecheng.sun.ac.za

Want more?

Interested in biomedical engineering, aeronautical engineering, satellite engineering, renewable energy, bioprocessing, artificial intelligence, ...?
 Do a **master's** and **PhD** degree in one of the above disciplines or in engineering management.



Show your parents how to read this



Waarom Universiteit Stellenbosch (US) kies?

Vir die besonderse vibel! Omdat die kampus deel van die dorp is, loop jy oral ander studente en vriende raak, die atmosfeer is fantasties, jy kry ongelooflike studente-afslag, en die dorp is klein genoeg dat jy maklik van jou woonplek af na die meeste dele van die kampus kan stap of fietsry.

Hierdie is wat jy vir jou ouers moet sê: Vir die groot leerervaring en omdat die US se ingenieurs-programme van die beste in Suid-Afrika is. Dis geakkrediteer deur die Ingenieursraad van Suid-Afrika en word in meer as 20 lande erken deur die Washington Verdrag, so jy kan moontlik oorsee gaan werk ... (Maar moenie gaan nie, ons het jou hier nodig!)

Watter vakke het ek nodig om aanvaar te word?

Suiwer Wiskunde en Fisiese Wetenskappe is 'n moet en tel dubbeld in die keuringsformule; vir ander vakvereistes, kyk na die Ingenieurswese Jaarboek op die webwerf.



Watter punte moet ek hê om aansoek te doen?

Dis die GROOT vraag! Daar is 'n keuringsformule wat die punte van die ses beste vakke gebruik (Lewensoriëntering uitgesluit). Daar is vereiste minimum punte wat jy moet hê om oorweeg te kan word, en dan is daar voorgestelde punte wat jou kans op keuring sal verbeter. Mededinging is taai en plekke is beperk, so maak seker dat jy die beste punte moontlik behaal. Jou Graad 11-punte word gebruik vir voorwaardelike toelating wat bevestig word na jou Graad 12-finale uitslae beskikbaar is. Die webwerf sal vir jou die nuutste keuringsformule gee (dit verander van tyd tot tyd).

Hoe lank duur die BIng?

4 Jaar vir die Baccalaureus in Ingenieurswese-programme. Daarna kan jy verder 'n meesters- of doktorsgraad nagraads doen.

5 jaar indien jy van 'n onderrigbenadeelde omgewing kom; die ekstra jaar sal jou help om die gaping tussen skool en die eerste jaar te oorbrug en jou op spoed te bring. Kyk na die webwerf vir die hierdie verlengde kurrikulum program (VGP).



In watter taal sal my lesings wees?

'n Afrikaanse opsie is vir die meeste modules in die eerste twee jaar beskikbaar, andersins Engels. Toetse en eksamens is in Afrikaans en Engels beskikbaar, en jy kan in Afrikaans of in Engels antwoord.

Hoe beweeg studente rond op kampus?



Stap of fietsry is die gewildste, en daar is fietsloodse op kampus waar jy jou fiets veilig kan toesluit terwyl jy klasloop. Jy kan 'n fiets van die Universiteit huur, of jou eie bring. Studentebussies volg vasgestelde roetes volgens 'n tydrooster. Of bring 'n motor, maar die verkeer en parkering is 'n uitdaging. (As ingenieur kan jy dalk die probleem vir ons oplos?)

Wat is 'n Matie?

Daar word nog altyd na studente van Universiteit Stellenbosch as Maties verwys. Jy sal die woord oral teëkom: in die dorp, op die US-webwerf, in die plaaslike koerante en natuurlik, by die Varsity Cup sportkompetisies!

Waar sal ek bly?

Universiteits- en privaatkoshuise is die gewildste keuse vir eerstejaars. Daar is aparte koshuise vir mans en dames en ook gemengde koshuise. Keuring vir 'n universiteitskoshuis word gebaseer op jou punte, so maak seker jy doen jou allerbeste, want dis moeilik om in te kom! Ander opsies is om 'n huis of woonstel te deel, of in 'n tuinwoonstel of 'n kamer in 'n privaat huis te bly. Sien maties.com vir meer inligting oor die verskillende universiteitskoshuise.



Wat sal ek studeer?

Alle BIng-eerstejaars neem dieselfde verpligte modules (BIng Data Ingenieurswese uitgesluit), maak nie saak vir watter program jy aansoek doen nie, asook een program-spesifieke module. Omdat almal dieselfde modules doen, kan jy oorsakel na 'n ander program in jou tweede jaar, mits jy al jou eerstejaarmodules slaag. Maklik!

In die eerste twee jaar, fokus jy op wiskunde, basiese- en ingenieurswetenskappe; in die 3de en 4de jaar leer jy hoe om jou kennis toe te pas om tegniese probleme op te los en hoe om sakegeleenthede te ontgin. Dis reg, sakegeleenthede. US-ingenieurs maak uitstekende entrepreneurs.

Hou aan lees om meer uit te vind oor die ses verskillende BIng-programme wat ons aanbied.



Doen aansoek Wanneer maak die aansoeke oop en wanneer sluit dit?

Besoek www.maties.com om op hoogte te bly van die aansoek- en sluitingsdatum of skandeer hierdie kode:



1

Bedryfsingenieurswese

Dink aan ingenieurswese wat ontmoet met besigheid en finansies, kunsmatige intelligensie en gevorderde vervaardiging, die internet van dinge en masjienleer, wereldklas gehalte en ondernemings wat oor kontinente strek. www.ie.sun.ac.za

2

Chemiese Ingenieurswese

Dink aan petroleum en platinum, geurmiddels en kunsmis, antibiotika en asetileen, skoon water en skoon energie, biobrandstof en biomateriale, die internet van dinge en masjienleer (Ja, hier ook!). chemeng.sun.ac.za

3

Elektriese & Elektroniese Ingenieurswese

Dink aan data, elektronika, robotika, hommeltuie, satelliete, berekeninge in die wolke, die internet van dinge en masjienleer (en hier!), telekommunikasie, radar, antennes, hernubare energie en slim netwerke. Data-ingenieurswese is 'n fokusarea wat by die bestaande voorgraadse graad in Elektriese en Elektroniese Ingenieurswese BIng gevoeg is. www.ee.sun.ac.za

4

Meganiese Ingenieurswese

Dink aan motors en vragmotors, vliegtuie en skepe, kragstasies en enjins, windturbines en sonkrag, knie-inplantings en nekstuttes, die internet van dinge en masjienleer (alweer!). www.mecheng.sun.ac.za

5

Megatroniese Ingenieurswese

Dink aan robotte wat motors monteer, outoloodse, meet van submikron eienskappe, robotte wat in operasies ingespan word, die internet van dinge en masjienleer (dis orals!), masjienvisie en die 4de industriële revolusie. www.mecheng.sun.ac.za

6

Siviele Ingenieurswese

Dink aan snelweë en verkeersvloei, damme en waterkanale, geboue en brûe, sportstadions en arenas, die internet van dinge en masjienleer (ja, orals!), ontwerp en konstruksie. civeng.sun.ac.za

Wil jy nóg meer hê?

Stel jy belang in biomediese ingenieurswese, lugvaartingenieurswese, satellietingenieurswese, hernubare energie, bioprosessering, kunsmatige intelligensie, ... ? Doen 'n meesters- en PhD-graad in een van die dissiplines hierbo of in ingenieursbestuur.



Wys jou ouers hoe om dié te lees