

# Data Sciences (Eng)

Offered by Stellenbosch University

## What to expect?

Data science is the application of computational, statistical, and machine learning techniques to gain insight into real world problems. The main focus of this module is on the data science project life cycle, specifically to gain a clear understanding of the five steps in the data science process, namely obtain, scrub/wrangling, explore, model, and interpret.

Each of these steps will be studied with the main purpose to gain an understanding of the requirements, complexities, and tools to apply to each of these life cycle steps. Students will understand the process of constructing a data pipeline, from raw data to knowledge. Case studies from the engineering domain will be used to explore each of these steps.

## Minimum admission requirements

The applicant must at least hold an approved BTech, BEng, or a BSc degree from a South African university or university of technology. In cases where the applicant's prior learning makes him/her a suitable candidate for the short course, his/her prior learning will be considered by the course leader in the application process. In taking part in this course, it is expected of the student to either:

- Have prior experience in the field of programming, or
- Has successfully completed a course in programming.

If either one of these requirements is not met, it is expected of the student to do some prior reading in preparation for this course. Contact the course facilitator for further details if this is the case.



**Stellenbosch**

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Department of Industrial Engineering

## PRESENTERS

Prof J Grobler, Industrial Engineering [View Bio](#)

Dr S Kasongo, Industrial Engineering [View Bio](#)

## PRESENTATION MODE AND DATES

**This short course is presented online.** [View dates](#)

The course consists of three parts:

2 Pre-block weeks

1 Lecture week

6 Post block weeks

## REGISTRATION

[Register here](#) 2 weeks before the Pre-block starts.

\* Take note: your registration and proof of payment must reach us before the Pre-block starts to gain access to the platform SUNOnline.

## ASSESSMENT

Pre-block assignment 20%

Lecture week assessments 20%

Post block assignments 3 x 20%

## CERTIFICATE OF COMPETENCE

Requirements - 50% average over all assignments submitted

## FEES 2023: R 20 000

NQF Level 8

## CONTACT

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