

# Data Analytics (Eng)

Offered by Stellenbosch University

## What to expect?

In this module students will learn the data analytics life cycle, and how to apply each phase of this life cycle to solve data analytics problems. Students will learn techniques for exploratory data analysis, and how to apply machine learning approaches for mining knowledge from data sets, to extract hidden patterns, associations and correlations from data. Students will gain the practical know-how needed to apply data analytics techniques to structured data. Students will learn advanced approaches to data analytics, with a specific focus on visual analytics, image analytics, and data analytics. The student will gain experience in the implementation of various techniques to extract meaning from these different data source types. The advanced data analytics techniques encountered will be applied to data intensive problems.

## 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 fields of data sciences, applied machine learning and optimisation,
- Has successfully completed courses data sciences, applied machine learning and optimisation.

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.



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Department of Industrial Engineering

## PRESENTERS

Prof A Engelbrecht, Industrial Engineering [View Bio](#)

LE Burger, 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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