SHORT COURSES

Optimisation (Eng)

Offered by Stellenbosch University

What to expect?

In this module students will learn about different classes of optimisation problems that can occur in the engineering domain, and will learn how to characterise the complexities of these optimisation problems. The student will learn a wide range of advanced metaheuristics and hyperheuristics that can be used to solve these different classes of optimisation problems. The student will gain experience in implementing advanced optimisation algorithms to solve real-world engineering optimisation problems. As one of the application areas, the module will explore ways in which optimisation techniques can be applied to improve the performance of machine learning algorithms.

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 during 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 and applied machine learning,
- Has successfully completed a course in data sciences and applied machine learning.

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.

PRESENTERS

Prof J van Vuuren, Industrial Engineering View Bio

Dr S Nel, 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

All the parts of the module (Pre-block, Lecture week and Post block) are assessed.

CERTIFICATE OF COMPETENCE

Requirements - 50% average over all assignments submitted

FEES 2023: R 20 000

NQF Level 8

CONTACT

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