Numerical methods for Civil Engineers 780 (SIK 780)

Qualification	Postgraduate
Faculty	Faculty of Engineering, Built Environment and Information Technology
Module credits	24.00
Programmes	BEngHons Geotechnical Engineering
	BEngHons Structural Engineering
	BEngHons Transportation Engineering
	BEngHons Water Resources Engineering
	BScHons Applied Science Applied Science: Geotechnics
	BScHons Applied Science Applied Science: Structures
Prerequisites	No prerequisites.
Language of tuition	English
Academic organisation	Civil Eng
Period of presentation	Year

Module content

A research term paper will be prepared.

In this course, numerical procedures for solving complex engineering systems with the aid of linear equations, eigenvalue procedures, numerical integration, finite differences analyses, finite elements review, Fourier transformation and optimization will be reviewed and discussed.
Some underlying theory for these numerical algorithms will be demonstrated and applicable and relevant problems associated with the use of these algorithms in the field of Civil Engineering will be covered.

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the General Rules section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.