Numerical analysis 362 (MAT 362)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	15.00
Prerequisites	MAT 251 and MAT 261
Contact time	3 lectures per week, 1 discussion class per week
Language of tuition	Module is presented in English
Academic organisation	Mathematics and Applied Maths
Period of presentation	Semester 2

Module content

Errors and floating point arithmetic. Roots of nonlinear equations: Bisection, Newton's method and the secant method, routines for zero finding, non-linear systems of equations. Systems of linear equations: Gauss elimination with partial pivoting, matrix factorisation, matrices with special structure, numerical differentiation and integration.

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.