



University of Pretoria Yearbook 2021

Numerical analysis 123 (WTW 123)

Qualification Undergraduate

Faculty Faculty of Natural and Agricultural Sciences

Module credits 8.00

NQF Level 05

Programmes BSc Information and Knowledge Systems

BSc Actuarial and Financial Mathematics

BSc Applied Mathematics

BSc Chemistry

BSc extended programme - Mathematical Sciences

BSc extended programme - Physical Sciences

BSc Mathematical Statistics

BSc Mathematics

BSc Physics

Service modules Faculty of Engineering, Built Environment and Information Technology

Prerequisites WTW 114

Contact time 1 practical per week, 2 lectures per week

Language of tuition Module is presented in English

Department Mathematics and Applied Mathematics

Period of presentation Semester 2

Module content

Non-linear equations, numerical integration, initial value problems for differential equations, systems of linear equations. Algorithms for elementary numerical techniques are derived and implemented in computer programmes. Error estimates and convergence results are treated.

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