



University of Pretoria Yearbook 2016

Numerical analysis 123 (WTW 123)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	8.00
Programmes	BSc Information Technology 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 Geography BSc Geology BSc Mathematics BSc Meteorology BSc Physics
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	WTW 114 GS
Contact time	1 tutorial per week, 2 lectures per week
Language of tuition	Both Afr and Eng
Academic organisation	Mathematics and Applied Maths
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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