

University of Pretoria Yearbook 2021

Numerical analysis 123 (WTW 123)

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| 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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