



# University of Pretoria Yearbook 2018

## Numerical analysis 383 (WTW 383)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module content</b>	Direct methods for the numerical solution of systems of linear equations, pivoting strategies. Iterative methods for solving systems of linear equations and eigenvalue problems. Iterative methods for solving systems of nonlinear equations. Introduction to optimization. Algorithms for the considered numerical methods are derived and implemented in computer programmes. Complexity of computation is investigated. Error estimates and convergence results are proved.
<b>Module credits</b>	18.00
<b>Programmes</b>	<a href="#">BCom</a> <a href="#">BCom Statistics</a> <a href="#">BSc Computer Science</a> <a href="#">BSc Actuarial and Financial Mathematics</a> <a href="#">BSc Applied Mathematics</a> <a href="#">BSc Chemistry</a> <a href="#">BSc Geology</a> <a href="#">BSc Mathematical Statistics</a> <a href="#">BSc Mathematics</a> <a href="#">BSc Physics</a>
<b>Service modules</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a> <a href="#">Faculty of Economic and Management Sciences</a> <a href="#">Faculty of Humanities</a>
<b>Prerequisites</b>	WTW 114, WTW 123 WTW 124 and WTW 211
<b>Contact time</b>	1 practical per week, 2 lectures per week
<b>Language of tuition</b>	Afrikaans and English are used in one class
<b>Department</b>	Mathematics and Applied Mathematics
<b>Period of presentation</b>	Semester 2

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