

University of Pretoria Yearbook 2019

Differential equations 286 (WTW 286)

Qualification Undergraduate

Faculty [Faculty of Natural and Agricultural Sciences](#)

Module credits 12.00

Programmes [BCom](#)

[BSc Applied Mathematics](#)

[BSc Chemistry](#)

[BSc Engineering and Environmental Geology](#)

[BSc Geology](#)

[BSc Mathematical Statistics](#)

[BSc Mathematics](#)

[BSc Meteorology](#)

[BSc Physics](#)

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Economic and Management Sciences

Prerequisites WTW 114, WTW 124 and WTW 162

Contact time 2 lectures per week, 1 tutorial per week

Language of tuition Module is presented in English

Department Mathematics and Applied Mathematics

Period of presentation Semester 1

Module content

*Students will not be credited for more than one of the modules for their degree: WTW 264, WTW 286

Theory and solution methods for ordinary differential equations and initial value problems: separable and linear first-order equations, linear equations of higher order, systems of linear equations. Application to mathematical models. Numerical methods applied to nonlinear systems. Qualitative analysis of linear systems.

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