



University of Pretoria Yearbook 2022

Differential equations 286 (WTW 286)

Qualification Undergraduate

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

Module credits 12.00

NQF Level 06

Programmes [BCom](#)

[BSc \(Computer Science\)](#)

[BSc \(Meteorology\)](#)

[BSc \(Applied Mathematics\)](#)

[BSc \(Chemistry\)](#)

[BSc \(Geography and Environmental Science\)](#)

[BSc \(Mathematical Statistics\)](#)

[BSc \(Mathematics\)](#)

[BSc \(Physics\)](#)

Service modules Faculty of Engineering, Built Environment and Information Technology

Faculty of Economic and Management Sciences

Prerequisites WTW 114, WTW 124, WTW 162, WTW 211#

Contact time 1 tutorial per week, 2 lectures 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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