



# 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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