University of Pretoria Yearbook 2025

Differential equations 256 (WTW 256)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	8.00
NQF Level	06
Programmes	BEng in Chemical Engineering 4-year programme
	BEng in Chemical Engineering 5-year programme
	BEng in Civil Engineering 4-year programme
	BEng in Civil Engineering 5-year programme
	BEng in Computer Engineering 4-year programme
	BEng in Computer Engineering 5-year programme
	BEng in Electrical Engineering 4-year programme
	BEng in Electrical Engineering 5-year programme
	BEng in Electronic Engineering 4-year programme
	BEng in Electronic Engineering 5-year programme
	BEng in Industrial Engineering 4-year programme
	BEng in Industrial Engineering 5-year programme
	BEng in Mechanical Engineering 4-year programme
	BEng in Mechanical Engineering 5-year programme
	BEng in Metallurgical Engineering 4-year programme
	BEng in Metallurgical Engineering 5-year programme
	BEng in Mining Engineering 4-year programme
	BEng in Mining Engineering 5-year programme
	BSc in Physics
	BSc in Physics 4-year programme
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	WTW 158 and WTW 164
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

Theory and solution methods for linear differential equations as well as for systems of linear differential equations. Theory and solution methods for first order non-linear differential equations. The Laplace transform with application to differential equations. Application of differential equations to modelling problems.

General Academic Regulations and Student Rules

The General Academic Regulations (G Regulations) and General Student Rules apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations. The G Regulations are updated annually and may be amended after the publication of this information.

Regulations, degree requirements and information

The faculty regulations, information on and requirements for the degrees published here are subject to change and may be amended after the publication of this information.

University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQSF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.