University of Pretoria Yearbook 2016

Differential equations 256 (WTW 256)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	8.00
Programmes	BEng Chemical Engineering
	BEng Chemical Engineering Engage
	BEng Civil Engineering
	BEng Civil Engineering Engage
	BEng Computer Engineering
	BEng Computer Engineering Engage
	BEng Electrical Engineering
	BEng Electrical Engineering Engage
	BEng Electronic Engineering
	BEng Electronic Engineering Engage
	BEng Industrial Engineering
	BEng Industrial Engineering Engage
	BEng Mechanical Engineering
	BEng Mechanical Engineering Engage
	BEng Metallurgical Engineering
	BEng Metallurgical Engineering Engage
	BEng Mining Engineering
	BEng Mining Engineering Engage
	BSc Chemistry
	BSc Environmental and Engineering Geology
	BSc Environmental Sciences
	BSc Mathematical Statistics
	BSc Mathematics
	BSc Meteorology
	BSc Physics

Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	WTW 158 and WTW 164
Contact time	2 lectures per week, 1 discussion class per week
Language of tuition	Both Afr and Eng
Academic organisation	Mathematics and Applied Maths
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.