University of Pretoria Yearbook 2016

Partial differential equations 386 (WTW 386)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	18.00
Programmes	BSc Actuarial and Financial Mathematics
	BSc Applied Mathematics
	BSc Chemistry
	BSc Environmental and Engineering Geology
	BSc Environmental Sciences
	BSc Geography
	BSc Geoinformatics
	BSc Geology
	BSc Mathematical Statistics
	BSc Mathematics
	BSc Meteorology
	BSc Physics
Service modules	Faculty of Education
Prerequisites	WTW 248 and WTW 286 or WTW 264
Contact time	1 tutorial per week, 2 lectures per week
Language of tuition	Double Medium
Academic organisation	Mathematics and Applied Maths
Period of presentation	Semester 1

Module content

Conservation laws and modelling. Fourier analysis. Heat equation, wave equation and Laplace's equation. Solution methods including Fourier series. Energy and other qualitative methods.