

# University of Pretoria Yearbook 2018

## Vector analysis 248 (WTW 248)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	12.00
<b>Programmes</b>	<a href="#">BEd Senior Phase and Further Education and Training Teaching</a> <a href="#">BSc Computer Science</a> <a href="#">BSc Applied Mathematics</a> <a href="#">BSc Chemistry</a> <a href="#">BSc Engineering and Environmental Geology</a> <a href="#">BSc Geology</a> <a href="#">BSc Mathematics</a> <a href="#">BSc Meteorology</a> <a href="#">BSc Physics</a>
<b>Service modules</b>	Faculty of Education
<b>Prerequisites</b>	WTW 218
<b>Contact time</b>	1 discussion class per week, 2 lectures per week
<b>Language of tuition</b>	Afrikaans and English are used in one class
<b>Department</b>	Mathematics and Applied Mathematics
<b>Period of presentation</b>	Semester 2

### Module content

Vectors and geometry. Calculus of vector functions with applications to differential geometry, kinematics and dynamics. Vector analysis, including vector fields, line integrals of scalar and vector fields, conservative vector fields, surfaces and surface integrals, the Theorems of Green, Gauss and Stokes with applications.

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