

# University of Pretoria Yearbook 2017

## Applications of integration 162 (MAT 162)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	8.00
<b>Prerequisites</b>	MAT 161
<b>Contact time</b>	3 lectures per week, 2 discussion classes per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Mathematics and Applied Maths
<b>Period of presentation</b>	Quarter 4

### Module content

Applications of integration: Areas between curves, volumes, volumes by cylindrical shells, work, average value of a function. Further applications of integration: Arc length, area of a surface of revolution. Differential equations: Modelling with differential equations, direction fields and Euler's method, separable equations, linear equations. Vector functions and multivariable functions.

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