

University of Pretoria Yearbook 2018

Applications of integration 162 (MAT 162)

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| Qualification | Undergraduate |
| Faculty | Faculty of Natural and Agricultural Sciences |
| Module credits | 8.00 |
| Prerequisites | MAT 161 |
| Contact time | 2 discussion classes per week, 3 lectures per week |
| Language of tuition | Module is presented in English |
| Department | Mathematics and Applied Mathematics |
| Period of presentation | 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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