

# University of Pretoria Yearbook 2020

## Calculus 218 (WTW 218)

**Qualification** Undergraduate

**Faculty** [Faculty of Natural and Agricultural Sciences](#)

**Module credits** 12.00

**Programmes** [BCom](#)

[BCom Econometrics](#)

[BCom Statistics](#)

[BCom Statistics and Data Science](#)

[BEd Senior Phase and Further Education and Training Teaching](#)

[BSc Actuarial and Financial Mathematics](#)

[BSc Applied Mathematics](#)

[BSc Chemistry](#)

[BSc Engineering and Environmental Geology](#)

[BSc Geology](#)

[BSc Mathematical Statistics](#)

[BSc Mathematics](#)

[BSc Physics](#)

**Service modules** [Faculty of Engineering, Built Environment and Information Technology](#)

[Faculty of Education](#)

[Faculty of Economic and Management Sciences](#)

**Prerequisites** WTW 114 and WTW 124

**Contact time** 1 tutorial per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Department** Mathematics and Applied Mathematics

**Period of presentation** Semester 1

### Module content

Calculus of multivariable functions, directional derivatives. Extrema and Lagrange multipliers. Multiple integrals, polar, cylindrical and spherical coordinates.



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