

## University of Pretoria Yearbook 2019

## Differential geometry 869 (WTW 869)

**Qualification** Postgraduate

Faculty of Natural and Agricultural Sciences

Module credits 0.00

Prerequisites Linear algebra, Differential and Integral calculus, Partial differential equations at

hons level

**Contact time** 1 lecture per week

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

**Department** Mathematics and Applied Mathematics

**Period of presentation** Semester 1 or Semester 2

## **Module content**

\*Consult with the Head of the Department of Mathematics and Applied Mathematics about the availability of this master's module in a particular year.

Differentiable manifolds; multilinear algebra; exterior differential calculus; integration of differential forms and De Rham cohomology; connections on frame bundles; Riemannian manifolds and submanifolds; second fundamental form; harmonic mappings between Riemannian manifolds.

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