

University of Pretoria Yearbook 2020

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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