

University of Pretoria Yearbook 2022

Differential geometry 869 (WTW 869)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	1.00
NQF Level	09
Prerequisites	Linear algebra, Differential and Integral calculus, Partial differential equations at honours 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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