

University of Pretoria Yearbook 2022

Homogenisation of partial differential equations 836 (WTW 836)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	1.00
NQF Level	09
Prerequisites	Functional Analysis, Measure Theory, 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.

Review of functional analysis, Sobolev spaces and variational problems; rapidly oscillating function; periodic composite materials; homogenisation of elliptic problems; multiple scale method; two-scale convergence and applications.

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