University of Pretoria Yearbook 2016

Advanced methods of financial engineering 832 (WTW 832)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	30.00
Programmes	MSc Financial Engineering
Prerequisites	Financial Engineering on honours level
Contact time	3 lectures per week
Language of tuition	English
Academic organisation	Mathematics and Applied Maths
Period of presentation	Year

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.
Interest rate derivatives. Stochastic volatility models. Models to improve on the flaws in the Black-Scholes model. Principles of deal structuring. Principles of mathematical models. Specialised methods for interest rate and exotic derivatives. Application of numerical methods to relevant practical problems.