University of Pretoria Yearbook 2016

Quantitative risk management 833 (WTW 833)

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	1 lecture 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.
Risk in perspective. Traditional RiskMetrics. Methods to calculate VaR. Designing scenario analyses and stress analysis. Risk measures based on loss distributions. Aggregate risk measures which include coherent risk measures. Extreme value theory. Correlation, copulas and dependence. Credit risk management.