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# University of Pretoria Yearbook 2016

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## Mathematical models of financial engineering 732 (WTW 732)

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| <b>Qualification</b>          | Postgraduate  |
| <b>Faculty</b>                | <a href="#">Faculty of Natural and Agricultural Sciences</a>  |
| <b>Module content</b>         | Introduction to markets and instruments. Futures and options trading strategies, exotic options, arbitrage relationships, binomial option pricing method, mean variance hedging, volatility and the Greeks, volatility smiles, Black-Scholes PDE and solutions, derivative disasters. |
| <b>Module credits</b>         | 15.00   |
| <b>Programmes</b>             | <a href="#">BScHons Financial Engineering</a><br><a href="#">BScHons Mathematics of Finance</a>   |
| <b>Prerequisites</b>          | No prerequisites.   |
| <b>Contact time</b>           | 2 lectures per week   |
| <b>Language of tuition</b>    | English   |
| <b>Academic organisation</b>  | Mathematics and Applied Maths   |
| <b>Period of presentation</b> | Semester 1  |

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