



# University of Pretoria Yearbook 2016

## Financial engineering 364 (WTW 364)

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| <b>Qualification</b>          | Undergraduate  |
| <b>Faculty</b>                | <a href="#">Faculty of Natural and Agricultural Sciences</a>   |
| <b>Module credits</b>         | 18.00  |
| <b>Programmes</b>             | <a href="#">BSc Actuarial and Financial Mathematics</a><br><a href="#">BSc Applied Mathematics</a><br><a href="#">BSc Chemistry</a><br><a href="#">BSc Environmental and Engineering Geology</a><br><a href="#">BSc Environmental Sciences</a><br><a href="#">BSc Geography</a><br><a href="#">BSc Geoinformatics</a><br><a href="#">BSc Geology</a><br><a href="#">BSc Mathematical Statistics</a><br><a href="#">BSc Mathematics</a><br><a href="#">BSc Meteorology</a><br><a href="#">BSc Physics</a> |
| <b>Prerequisites</b>          | WST 211, WTW 126, WTW 218 and WTW 286 or WTW 264   |
| <b>Contact time</b>           | 2 lectures per week, 1 tutorial per week   |
| <b>Language of tuition</b>    | English  |
| <b>Academic organisation</b>  | Mathematics and Applied Maths  |
| <b>Period of presentation</b> | Semester 2   |

### Module content

Discrete time financial models: Arbitrage and hedging; the binomial model. Continuous time financial models: The Black-Scholes formula; pricing of options and the other derivatives; interest rate models; numerical procedures.

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