MAJOR IN QUANTITATIVE RISK
IN NEW UNSW ADVANCED MATHEMATICS DEGREE

Year 1 Session 1
MATH1151 Mathematics for Actuarial Studies and Finance 1A
ACCT1501 Accounting and Financial Management 1A
ECON1101 Microeconomics 1
6 UOC Free electives (suggested: COMP1911 Computing 1; MATH1081 Discrete Mathematics; FINS1612 Capital Markets and Institutions)

Year 1 Session 2
MATH1251 Mathematics for Actuarial Studies and Finance 1B
FINS1613 Business Finance
SCIF1021 Scientific Thinking
6 UOC General Education

Year 2 Session 1
MATH2111 Higher Several Variable Calculus
MATH2901 Higher Theory of Statistics
ACTL2001 Financial Mathematics
FINS2624 Portfolio Management

Year 2 Session 2
MATH2601 Higher Linear Algebra
MATH2881 Quantitative Risk (new course)
MATH2931 Higher Linear Models
MATH2060 Professional Issues and Ethics in Mathematics
3 UOC Mathematics Level 2 or 3 electives

Year 3 Session 1
MATH3901 Higher Probability and Stochastic Processes
FINS3635 Options, Futures and Risk Management
FINS3636 Interest Rate Risk Management
6 UOC Mathematics Level 3 electives
Year 3 Session 2
ACTL3003 Insurance Risk Models
FINS3655 Behavioural Finance (new course)
6 UOC Mathematics Level 3 electives
6 UOC General Education

Year 4
MATH4803 Honours Quantitative Risk (48 UOC) (new course)
Consisting of an 18 UOC project plus 30 UOC selected (with advice and subject to approval of the appropriate School) from the following or other approved courses:
ACTL5301 Models for Risk Management
ACTL5302 Risk and Capital Management
ACTL5303 Asset-Liability Pricing
ACTL5304 Risk Management Strategies
FINS4775 Research Methods in Finance 1
FINS4776 Advanced Topics in Asset Pricing
FINS4779 Research Methods in Finance 2
MATH5335 Computational Methods for Finance MATH5816 Continuous Time Financial Modelling
MATH5825 Measure, Integration and Probability
MATH5835 Stochastic Processes
MATH5905 Statistical Inference
MATH5985 Term Structure Modelling