COURSE DETAIL

FURTHER QUANTITATIVE METHODS (MATHEMATICS)

Country
United Kingdom - England

Host Institution
London School of Economics

Program(s)
London School of Economics

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Mathematics

UCEAP Course Number
114

UCEAP Course Suffix

UCEAP Official Title
FURTHER QUANTITATIVE METHODS (MATHEMATICS)

UCEAP Transcript Title
FURTHER QUANT METHD

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description
This is a second course in quantitative methods, following on directly from Quantitative Methods (Mathematics) (MA107). This course contains further algebra and calculus. As with the course MA107, the emphasis is on applications in economics and finance. Topics include matrix methods in portfolio analysis; linear independence; rank of a matrix; eigenvalues and eigenvectors; diagonalization; linear systems of recurrence equations; Markov process; second-order recurrence equations; macroeconomic models; vector geometry; gradient and directional derivative; tangent hyperplanes and the optimal bundle; resource allocation and Pareto efficiency; orthogonal matrices and quadratic forms; critical points of quadratic functions; Taylor's approximation; and optimization of functions of two or more variables.

Language(s) of Instruction
English

Host Institution Course Number
MA207

Host Institution Course Title
FURTHER QUANTITATIVE METHODS (MATHEMATICS)

Host Institution Campus
London School of Economics

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

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