COURSE DETAIL

NUMERICAL ANALYSIS II

Country
Singapore

Host Institution
National University of Singapore

Program(s)
National University of Singapore

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Mathematics

UCEAP Course Number
109

UCEAP Course Suffix
B

UCEAP Official Title
NUMERICAL ANALYSIS II

UCEAP Transcript Title
NUMERIC ANALYSIS II

UCEAP Quarter Units
6.00

UCEAP Semester Units

4.00

Course Description
This course is a continuation of MA2213 Numerical Analysis I. It introduces and analyzes important numerical methods for solving linear and nonlinear systems, two-point boundary value problems, as well as Monte Carlo methods and their applications in such fields as quantitative finance and physics. The course develops problem-solving skills in emerging applications of modern scientific computing, and is intended for mathematics and quantitative finance majors and students from engineering, computer science and physical sciences. Major topics: Iterative methods for systems of linear equations and their convergence analysis, numerical solutions of systems of nonlinear equations, methods for solving two-point boundary value problems, Monte Carlo methods and their applications.

Language(s) of Instruction
English

Host Institution Course Number
MA3227

Host Institution Course Title
NUMERICAL ANALYSIS II

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

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