

COURSE DETAIL

ACTUARIAL MATHEMATICS

Country

Hong Kong

Host Institution

Hong Kong University of Science and Technology (HKUST)

Program(s)

Hong Kong University of Science and Technology

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

110

UCEAP Course Suffix**UCEAP Official Title**

ACTUARIAL MATHEMATICS

UCEAP Transcript Title

ACTUARIAL MATH

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course covers the fundamental concepts of actuarial financial mathematics and how these concepts are applied in calculating present and accumulated values for various streams of cash flows. The topics covered include interest rates, present value, annuities valuation, loan repayment, bond and portfolio yield, bond valuation, rate of return, yield curve, term structure of interest rates, duration and convexity of general cash flows and portfolios, immunization, stock valuation, capital budgeting, dynamic cash flow processes, and asset and liability management.

Language(s) of Instruction

English

Host Institution Course Number

MATH2511

Host Institution Course Title

FUNDAMENTALS OF ACTUARIAL MATHEMATICS

Host Institution Course Details**Host Institution Campus****Host Institution Faculty****Host Institution Degree****Host Institution Department**

Mathematics

Course Last Reviewed

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