

COURSE DETAIL

MATHEMATICS OF RISK

Country

China

Host Institution

Tsinghua University

Program(s)

Tsinghua University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics Economics

UCEAP Course Number

109

UCEAP Course Suffix

A

UCEAP Official Title

MATHEMATICS OF RISK

UCEAP Transcript Title

MATHEMATICS OF RISK

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course provides a foundational introduction to the basics of actuarial science, focusing on the theory of interest and life contingencies and their application to lifecycle planning. It explores key actuarial models to analyze essential financial concepts, including economic balance sheets, personal net worth, human capital, assets, liabilities, and the fundamentals of retirement planning. In light of rapid advancements in artificial intelligence, this course emphasizes the practical integration of these technologies. Students will learn to harness the power of large language models (LLMs) to assist in and elevate the actuarial analysis of financial scenarios.

Language(s) of Instruction

English

Host Institution Course Number

40511373

Host Institution Course Title

MATHEMATICS OF RISK I

Host Institution Course Details

<https://www.tsinghua.edu.cn/en/Admissions/Undergraduate/Curriculum.htm>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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