

COURSE DETAIL

OPTIMIZATION, DECISION MATHEMATICS AND VARIATIONAL PRINCIPLES

Country

United Kingdom - England

Host Institution

University of Cambridge, Pembroke College

Program(s)

Summer in Cambridge

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

104

UCEAP Course Suffix

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UCEAP Official Title

OPTIMIZATION, DECISION MATHEMATICS AND VARIATIONAL PRINCIPLES

UCEAP Transcript Title

OPTIMIZATN/DEC MATH

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course introduces students to a variety of applicable mathematical methods for solving real-world problems. It is intended for students interested in how further mathematics can be used to solve hands-on problems. The economically-minded will be interested in optimizing based on constrained resources, and computer scientists will be interested in the various network algorithms explored. Physicists will find the material at the end of the course indispensable for solving classical problems. The game theory section of the course includes a discussion of the assumptions made about how rational agents act, which may interest psychologists and philosophy students.

Language(s) of Instruction

English

Host Institution Course Number

Host Institution Course Title

OPTIMISATION, DECISION MATHEMATICS AND VARIATIONAL PRINCIPLES

Host Institution Course Details

<https://www.pem.cam.ac.uk/international-programmes/pembroke-cambridge-summer-pr...>

Host Institution Campus

Pembroke College

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

Course Last Reviewed

2022-2023

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