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
S

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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