

COURSE DETAIL

FUNDAMENTALS OF OPERATIONAL RESEARCH

Country

United Kingdom - Scotland

Host Institution

University of Edinburgh

Program(s)

University of Edinburgh

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

140

UCEAP Course Suffix**UCEAP Official Title**

FUNDAMENTALS OF OPERATIONAL RESEARCH

UCEAP Transcript Title

OPERATIONL RESEARCH

UCEAP Quarter Units

4.00

UCEAP Semester Units

2.70

Course Description

Dynamic programming is a neat way of solving sequential decision optimization problems. Integer Programming provides a general method of solving problems with logical constraints. Game theory is concerned with mathematical modelling of behavior in competitive strategic situations in which the success of strategic choices of one individual (person, company, server, ...) depends on the choices of others. By the end of this course, students have gained: ability to formulate and solve a sequential decision optimization problem; ability to formulate and solve optimization problems with logical constraints; ability to find optimal and equilibrium strategies for zero- and nonzero-sum 2x2 matrix games; and mastery of the theory underlying the solution methods.

Language(s) of Instruction

English

Host Institution Course Number

MATH10065

Host Institution Course Title

FUNDAMENTALS OF OPERATIONAL RESEARCH

Host Institution Campus

Edinburgh

Host Institution Faculty

School of Mathematics

Host Institution Degree

Host Institution Department

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