COURSE DETAIL

ADVANCED MANAGEMENT SCIENCE
Country Korea, South
Host Institution Seoul National University
Program(s) Seoul National University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Business Administration
UCEAP Course Number 172
UCEAP Course Suffix
UCEAP Official Title ADVANCED MANAGEMENT SCIENCE
UCEAP Transcript Title ADV MANAGEMENT SCI
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course focuses on learning how to structure and solve complex decision problems and analyzing their property and solutions quantitatively. It covers advanced theories, algorithms, and applications of management science in the context of quantitative decision modeling and optimization. Topics include the theory and applications of linear, nonlinear, integer programming, as well as advanced modeling approaches to optimization problems under various sources of uncertainty. Students will also explore recent advances in the field, including integration with machine learning, and address real-world decision challenges across various domains, ranging from finance, marketing, and production to healthcare, sports management, and humanitarian operations. The course involves hands-on learning using relevant languages (e.g., Excel, Python) and state-of-the-art solvers. A basic understanding of mathematical optimization and probability is required.

Language(s) of Instruction
English

Host Institution Course Number
251.652

Host Institution Course Title
ADVANCED MANAGEMENT SCIENCE

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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