

# 國立中正大學企業管理碩士在職專班教學大綱

## 115 學年度第 1 學期

編號：520A129

科目名稱：管理科學

英文譯名：Management Science

修別 / 學分數：選修 / 2

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### 教學目標：

The course is designed for EMBA students who are interested in using operations research techniques as a research tool. Topics include linear programming and related models, network models, decision analysis, Markov chains, and queueing theory. Preliminary knowledge of linear algebra and probability is recommended.

### 授課大綱：

- Review of Mathematical Background
- Linear Programming (LP)
  - Graphical, Algebraic, and Simplex Methods
  - Sensitivity Analysis & Duality
  - LP Applications and LINDO Solution
- Special LP Models
  - Assignment / QAP
  - Transportation / Transshipment Problems
  - $p$ -Median /  $p$ -Center Problems
  - Data Envelopment Analysis (DEA)
  - Others
- Integer Programming
- Network Models
- Decision Analysis (Analytic Hierarchy Process, AHP)
- Markov Chain
- Queueing Models

教科書： “Operations Research: An Introduction”, 9<sup>th</sup> ed. (2011), Hamdy Taha.  
Supplementary Materials.

評量方式： 課堂參與：40% 期中考：30% 期末報告：30%