

COURSE CODE: MGTSCIE

COURSE TITLE: Management Science

COURSE DESCRIPTION:

This course (MGTSCIE / MANAGEMENT SCIENCE) a 14-week course on the study of quantitative techniques in business decision- making. The course covers linear programming models and its special algorithm, network (PERT/CPM) models and transportation models; decision-making theories and processes; and decision tree construction and analysis using manual and computer solution methods.

DEPARTMENT: Decision Sciences and Innovation Department

TEXTBOOK:

- Subscription to McGraw Hill Connect - Book/ebook:

Hillier, F. and Hillier, M. (2019). Introduction to Management Science: A Modeling and Case Studies Approach (6th ed.). New York: McGraw Hill Education.

READING LIST:

- Albright, C. S., & Winston, W. L. (2019). Business Analytics: Data Analysis & Decision Making 7th Edition. Cengage Learning Asia.
- Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm J. D., & Cochran, J. J. (2018). Modern Business Statistics with Microsoft Excel. Cengage Learning Asia.
- Camm, J.D., Cochran, J.J., Fry, M.J., Ohlman, J.W., Anderson, D.R., Sweeney,D.J., Williams, T.A. (2017). Essentials of Business Analytics (2nd Ed.) Cengage Learning.
- Render, B., Stair, R., & Hanna, M. (2012). Quantitative Analysis for Management (11th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

REQUISITE EQUIPMENT/MATERIALS FOR THE COURSE:

Required Software:

- MS Excel 2016 or later with plug-in SOLVER Add-in.
<https://support.microsoft.com/en-us/office/load-the-solver-add-in-in-excel-612926fc-d53b-46b4-872c-e24772f078ca#OfficeVersion=Windows>

