



INDIAN INSTITUTE OF TECHNOLOGY KANPUR

INDUSTRIAL AND MANAGEMENT ENGINEERING DEPARTMENT

MBA651: QUANTITATIVE METHODS FOR DECISION MAKING

Instructor:	IME Faculty
Office:	IME Dept.
Phone:	7376 (O)
Email:	N/A
Course Name:	Quantitative Methods (3-0-0-0-10)
Course number:	MBA 651
Department:	Industrial and Management Engineering
Proposer's Name:	N/A
Pre-requisite	N/A

Syllabus/Course Content

Introduction to decision analysis and process, Simplex Method, Duality Theory, Network Problems, Decision Sciences, Elementary probability theory, conditional probability, Bayesian decision analysis, EVPI, moment generating functions, the central limit theorem, Descriptive and deductive statistics, Sampling techniques, Estimation, Hypothesis testing and Regression.

Text books/References

- 1) Albright, S. C., Winston, W. and Zappe, C. J., Decision Analysis & Decision making, Thomson Press, ISBN(10): 9812435433.
- 2) Freund, John E, Mathemaical Statistics with Applications, Pearson Education, ISBN(10): 81-7758-7552.
- 3) Levin, Richard I and Rubin David S., Statistics for Management, Person Publication, ISBN(13): 978-81-7758-5841.
- 4) Render, B., Stair, Jr. R. M., Hanna, M. E. and Badri, T. N., Quantitative Analysis for Management, Pearson Publication, ISBN(13): 9788131723739.
- 5) Taylor III, B. W., Introduction to Management Science, Pearson Publication, ISBN(13): 9788131720714.

