



IIT Mandi Proposal for a New Course

Course number : MB592
Course Name : MANAGEMENT SCIENCE IN PRACTICE – A MODELLING AND CASE STUDIES APPROACH WITH MS-EXCEL.
Credit : 1-0-2-2
Distribution : L-T-P-C
Intended for : MBA
Prerequisite : None
Mutual Exclusion: (courses with high similarity not allowed to credit by the students after or along with this course)

1. Preamble:

This course is aimed to make the applications of Management Science tools in the problems of managerial decision-makings in Industry and Management Consultancies. The modern approach to of teaching management science is clearly to use spreadsheets (MS-Excel). Present day business students and managers live with spreadsheets. Therefore, the course is based on varieties of business cases through MS-Excel add-ins.

COURSE OBJECTIVES

The objective of the course is to build a comfortable and enjoyable learning environment amongst the business students by solving varieties of business cases through MS-Excel add-ins. Modern spreadsheets add-in software like, SOLVER, Tree-Plan, Sensit, Data Analysis and SOLVER TABLE will be used in the course to model and solve the functional management problems.

Management Science concepts including Multiple Criteria Decision Analysis will be used as appropriate to solve various application oriented problems in the management. The course contains the problems in following applications as short cases along with the theoretical concepts. Ms-Excel will be used to model and solve all the case problems.

2. Course Modules with quantitative lecture hours:

Management Science concepts including Multiple Criteria Decision Analysis will be used as appropriate to solve various application oriented problems in the management. The course contains the problems in following applications as short but real cases along with the theoretical concepts therein.

Ms-Excel will be used to model and solve all the case problems in the following areas

The session details:

1. Work force Planning in call centres when the call centre requires dealing with multiple languages.
2. Banking Applications – Net Banking
3. Investment Planning
4. Cash Flow management
5. Personal Scheduling in Airlines
6. Corporate Financial Planning
7. Advertising - Media Planning in the web
8. Supply Chain Management
9. Production and Manufacturing
10. Inventory Management
11. Predictive Maintenance planning
12. Product planning and allocation in automobile industries.
13. Oil exploration planning in Oil and Gas Industries
14. Construction projects
15. Management Science in Indian Train Reservation
16. Indian General Election Planning
17. Airport Security Management-with a special reference to WTC
18. Hub Management in Airline Industries
19. Foreign Currency Trading (currency arbitrage)
20. Multicriteria Decision Making in Marketing Management.

EVALUATION

- End term exam
- Quizzes/ Assignments

GRADING SCHEME

End Term Exam	60%
Quizzes/ Assignments	40%

3. Text books:

1. Introduction to Management Science- A modelling and case studies approach F.S. Hillier and M.S. Hillier
2. Practical Management Science , Winston and Albright
3. Essentials of Business Analytic

4. References:

(No limit on numbers, relevant)

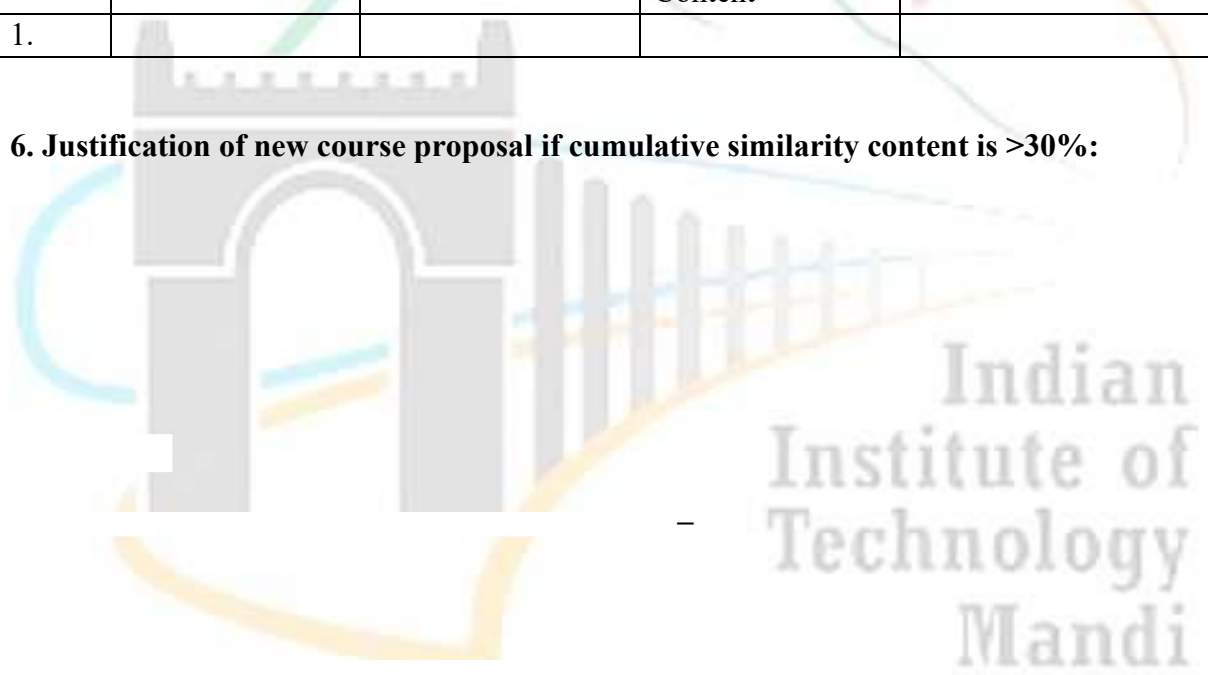
Standard format can be followed, the formats should be similar)

5. Similarity with the existing courses:

(Similarity content is declared as per the number of lecture hours on similar topics)

S. No.		Course Code	Similarity Content	Approx. % of Content
1.				

6. Justification of new course proposal if cumulative similarity content is >30%:



Chairperson, BoA

Date: _____

