Programme: MMS Semester: IV Specialisation: Marketing Period: Jan - April 2021
Course Code: MMS-4-OP-E-01
Name of the subject: Operations Applications and Cases
Maximum marks: 100 (60+40)   No. of Sessions: 13 (Total 40 hrs)
Name of the Faculty: Naimesh R Tungare
Mobile No: 9819094862   Email: nrtungare@yahoo.com

Program Outcomes (PO)	Course Outcomes (CO)
1. Nurture leadership skills, team-membership skills and mutual trust. 2. Demonstrate decision-making ability. 3. Ability to develop culture of technology-usage. 4. Inculcate social sensitivity among students. 5. Integrate and apply business knowledge and management techniques for problem-solving / analytical skills.	1. Applications and analysis of cases to understand Operations processes in Industry. 2. Applications of Tools and techniques for efficient decision making in today's industry. 3. Developing various data models using latest IT enabled tools and understand their integration and application for business knowledge in service industry.

Reference Books:

1. Microsoft Excel 2019 Data analysis and business Modelling- By Wayne L Winston
2. Introduction to Management Science- a Modelling and Case studies Approach with spreadsheets – By Frederick S Hiller, Mark S. Hiller
3. Business analytics – U Dinesh Kumar

   A. Plan:

Session No.	Planned Date	Topic	Ref. Study Material	Course Outcomes
1	8.1.21	Information systems importance in Industry, MIS, Information as Resource Tools for Data driven decisions,	Session ppt from reference books	Familiarization to Decision making techniques and software.
2	15.1.21	Classification of data. Time series and cross sectional data applications, Data measurement scale. Use of	Session ppt from reference books	Application of software to analyse KPI's by measurement and

		IBM SPSS for analytics.		analysis.
3	22.1.21	Use of Operations analytics, Applications in Predictive analytics using Advance Excel.	Session ppt from reference books	Application of Solver to understand optimum Product mix and it's effect on Objective functions.
4	29.1.21	Understanding various analytics techniques and its applications. Source of data for analytics. ERP ROI through Advanced Excel	Session ppt from reference books	Familiarization to Cost benefit analysis. Application of ROI principles before Investments.
5	5.2.21	Data visualization through Advanced excel charting tools. Use of IBM SPSS for Descriptive statistics.	Session ppt from reference books	Familiarity of Excel and SPSS tools for solving industry relevant problems.
6	12.2.21	**Internal Test** Data summarization through Histograms, pareto charts and scatter plots.	Session ppt from reference books	Familiarity of Excel and SPSS tools for solving industry relevant problems.
7	19.2.21	Using solver for Transportation optimization and procurement buying decision making	Session ppt from reference books	Application of Advanced Excel tools usage in Logistics Industry.
8	26.2.21	Usage of Excel Pivot tables to generate Retail store MIS and Operational decisions from Reports.	Session ppt from reference books	Usage of MIS and Business intelligence in Modern Retail Industry.
9	5.3.21	Various methods of Forecasting sales. Measuring Mean average deviation and usage of Regression models in BPO industry.	Session ppt from reference books	Application of Forecasting techniques. Application and usage through modelling.
10	12.3.21	Inventory Modelling through Advanced Excel. Usage of EOQ and EBQ in Procurement and production functions	Session ppt from reference books	Application of decision support system in Inventory Modelling
11	19.3.21	Investment decision making using NPV and advanced Excel	Session ppt from reference	Familiarization of solver for Investment

		spreadsheet Modelling	books	decisions, formulation of Spreadsheet Modelling
12	26.3.21	**Internal Test** Applications of learning in tendering and bidding	Session ppt from reference books	Applications of E-Tendering and IT enabled applications.
13	9.3.21	Applications in insurance, BPO/KPO, Entertainment industry	Session ppt from reference books	Applications of advanced tools in other industries and familiarization to Industry best practices.

B. Practical Approach: Other activities

Sr. No.	Activity Name	Topic Covered	Learning Outcomes	Source
1	Case study	Forecasting Techniques	Application of Forecasting methods	Reference books
2	Academic Projects			
3	Group Discussion	EBQ, EOQ Modelling	Hands on practice on Excel modelling	Reference books
4	Role Play			
5	Industry Visit			
6	Business Quiz / Business News sharing			
7	Videos / Simulation			
8	Use of Software and Labs	IBM SPSS, Excel solver	Familiarity in handling software and	Reference books

			drawing conclusions	
9	Any other activity			

C. **Innovative Pedagogy adopted:**

On line sessions. Student's participation through Class tasks and problem solving. IBM SPSS software hands on practice and application in solving various industrial Analytics problems.

D. **Industrial sector focused through the course:**

Operations- Pharma, IT, Manufacturing, service Industry- Insurance and Banking

E. **Types of job profile available in the sector:**

Operations Executive

F. **Skill sets for the given job profiles as learning outcomes of the course:**

1. Problem solving.
2. Application of- advanced Excel and IBM SPSS software tools
3. Decision making
4. Improved Communication through presentations.

Prepared by: NAIMESH TUNGARE   **Approved by:**

Faculty   **Specialisation Head**

Date: 6.1.2021   **Date:**

Execution:

Session No.	Actual Date	Topic Covered	Evaluation Method	Case Study Ref.	Quiz Ref.	CR Sign

A. Evaluation:

Component	Details	Marks
Presentations	Mandatory	10
Class Tests	Mandatory (MCQ, Descriptive, etc)	20
Attendance & Active Participation	Mandatory	5
Overall Conduct	Mandatory	5
Final Exam	Mandatory	60

Comments / Suggestions / Recommendations:

Suggestions (if any) to students on subject related Certificate/Diploma or Add-on program: -

Signature of Faculty   **Signature of Co-ordinator**