| Course Type | Course Code | Name of Course | L | T | P | Credit |
|-------------|-------------|----------------------|---|---|---|--------|
| DP | NMSC505 | Spreadsheet Modeling | 0 | 0 | 3 | 1.5 |

Course Objective

Students will gain an understanding of how managers use Spreadsheet Modeling to formulate and solve business problems and to support managerial decision making.

Learning Outcomes

Students will gain hands-on experience of Spreadsheet modeling in the current business scenario.

| Unit No. | Topics to be Covered | Lecture Hours | Learning Outcome |
|-------------|---|------------------|---|
| 1 | Introduction to Spreadsheet Modeling (Data Entry, Data Preparation, solving business problems with excel). Excel function like SUMIF, AVERAGEIF, INDEX, MATCH, VLOOKUP, HLOOKUP. | 10 | Students will learn the hands-on experience on spread sheet and various applications. |
| 2 | Statistical methods, Multiple linear regression, Frequency distribution, Graphical presentation, Visualisation of data in Dashboard. Charts like Scatter, Line, Bar, Radar, Sunburst. | 12 | Students will learn the hands-on experience on spread sheet and various statistical method and their application. |
| 3 | Decision Analysis: Decision Trees, Sensitivity Analysis, Value of Information, Buy or make | 12 | In this section students will learn various decision, making tools and their application through excel |
| 4 | Simulation basics, Distribution selection, Parametric sensitivity, Tornado analysis, Monte Carlo Simulation | 8 | In this section students will learn about simulation and its application. |
| | Total Lecture Hours | 42 | |

Text Books:

- 1. Business Analytics: The Art of Modeling With Spreadsheets, 5th Edition Stephen G. Powell, Kenneth R. Baker
- Succeeding in Business with Microsoft Excel 2013 A problem-solving approach, Debra Gross, Frank Akaiwa, Karleen Nordquist

Reference Books:

3. Spreadsheet Modeling and Decision Analysis: A Practical Introduction to Business Analytics Cliff Ragsdale