**Semester -IV**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Course** | | |  | **Course** | |  |  |  |  | **Course/** |  | **Lecture** | | **Tutorial** | |  | **Practic** | | | |  |  |  |
|  |  |  | **Type** | |  | **Categor** |  |  |  | **Credit** |  |
|  | **Code** | | |  | **Name** | |  |  |  | **(L)** |  |  | **(T)** |  | **al (P)** | | |  |  |  |
|  |  |  |  |  |  | **y** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | N8MCA4P | | |  | Business | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Intelligent | |  | Core | |  | Practical |  | 2 |  |  | 2 |  | 46 | |  |  |  | 3 |  |
|  |  | 85 | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Lab | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Preamble:** This course aims at facilitating the student to | | | | | | | | | | | | | | | apply | data and analytics to | | | | | | |  |
|  | reshape business models, operations, and decision-making processes. To build and sustain a | | | | | | | | | | | | | | | | | | | | | | |  |
|  | competitive advantage by expanding company's analytics capabilities | | | | | | | | | | | | | | | |  |  |  |  |  |  |  |  |
|  | **Prerequisite:** Basic knowledge in Probability and statistical functions and decision support | | | | | | | | | | | | | | | | | | | | | | |  |
|  | system in UG level | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Syllabus** | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Ex.** |  | **List of Exercises** | | | | |  |  |  |  |  |  |  |  | **Hours** | | |  | **e-References/** | | | | |
|  | **No.** |  |  |  |  |  |  |  |  |  |  |  | **e-Manual** | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 |  | Create your own Blog/Website. | | | | | | | |  |  |  |  |  | 8 | |  |  |  |  |  |  |  |
|  |  |  |  | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Perform the following examples in data analytical tool - | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  | 2 |  | Count | | and | Sum, Logical, | | | Cell References, Date | | | | | | & | 8 | |  |  |  |  |  |  |  |
|  |  | Time, Text, Lookup & Reference, Financial, Statistical, | | | | | | | | | | | | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Round, Formula Errors, Array Formulas | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Create | | the following | | | in Excel: Spin Buttons, | | | | | | Scroll | |  |  |  |  |  |  |  |  |  |
|  | 3 |  | Bars, Option Buttons, Check Boxes, Combo Boxes, and | | | | | | | | | | | | | 8 | |  |  |  |  |  |  |  |
|  |  |  | Group List Boxes | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Create a Macro, MsgBox, If Then Statement, Macro | | | | | | | | | | | | |  |  |  |  |  | e-Reference | | | |
|  | 4 |  | Errors, | | String Manipulation, | | | | | | Function and | | | Sub, | | 8 | |  |  |  |
|  |  |  | URL/Reference | | | | | |
|  |  |  | Application Object, ActiveX Controls, Userform | | | | | | | | | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | e-Books | | |
|  |  |  | Perform the following examples in data analytical tool - | | | | | | | | | | | | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | 5 |  | Sort, Filter, | | | Conditional | | | Formatting, | | | Charts, | | Pivot | | 9 | |  |  |  |  |  |  |  |
|  |  | Tables, Tables, What-If Analysis, Solver, Analysis | | | | | | | | | | | | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ToolPak | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | MySQL for Excel: Installation , Configuration, Edit | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  | MySQL Data in Excel, Import MySQL Data into Excel | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  | 6 |  | - Importing a Procedure , Import — Advanced Options, | | | | | | | | | | | | | 9 | |  |  |  |  |  |  |  |
|  |  | Adding Summary Fields, Creating PivotTables, Append | | | | | | | | | | | | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Excel Data into MySQL - Column Mappings, Append | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  | — Advanced Options, Export Excel Data into MySQL | | | | | | | | | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Total** | | **50** | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Reference URLs/Book(s):**

1. http://www.excel-easy.com/functions.html

2. E-Book: MS Excel-Data Analysis and Business Modelling By Wayne L. Winston

3. http://www.excel-easy.com/vba.html

4. http://www.excel-easy.com/data-analysis.html

5. https://downloads.mysql.com/docs/mysql-for-excel-en.pdf

6. https://dev.mysql.com/doc/mysql-for-excel/en/

**Tools to be used:** Microsoft Excel 2011

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**Focus of Course:** Skill Development(Employability/Entrepreneurship/Skill Development)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course Designer: **Dr. M. Elamparithi,** | |  |  |  |
| Associate Professor, Dept. of MCA, STC | | BoS Chairman | | |
|  |  |  |  |  |
| **Course Outcomes (COs)** | |  |  |  |
|  |  |  |  |  |
| On successful completion of this course the students will be able to: | |  |  |  |
|  |  |  |  |  |
|  |  |  | **Blooms** |  |
| **CO** | **Course Outcome (CO) Statement** |  | **Taxonomy** |  |
| **Number** |  | **Knowledge** |  |
|  |  |  |
|  |  |  | **Level** |  |
| CO1 | Understand the fundamental concepts of data analytic |  | K1 |  |
|  |  |  |  |  |
| CO2 | Examine the business implications, meaningfulness and |  | K4 |  |
| applicability of observed data patterns and analytical inferences | |  |
|  |  |  |
| CO3 | Apply appropriate data analytical functions for specific |  | K3 |  |
| managerial issues |  |  |
|  |  |  |  |
| CO4 | Evaluate the proficiency with several data–analytic methods |  | K4 |  |
|  |  |  |  |  |

**Mapping Course Outcomes with Program Outcomes and Program Specific Outcomes:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COs/POs** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PSO1** | **PSO2** | **PSO3** | **PSO4** | **PSO5** |
| **& PSOs** |
|  |  |  |  |  |  |  |  |  |  |
| **CO1** | L | L | M | S | M | M | M | M | L | S |
|  |  |  |  |  |  |  |  |  |  |  |
| **CO2** | M | M | M | S | M | M | M | M | L | S |
|  |  |  |  |  |  |  |  |  |  |  |
| **CO3** | M | M | M | S | M | M | M | M | M | S |
|  |  |  |  |  |  |  |  |  |  |  |
| **CO4** | M | M | M | S | M | M | M | M | M | S |
|  |  |  |  |  |  |  |  |  |  |  |
| **S – Strong; M – Medium; L – Low** | | | | |  |  |  |  |  |  |

**Assessment Component Matrix**

|  |  |
| --- | --- |
| **Assessment Component** | **Marks** |
| Test | 40 |
| Attendance | 10 |
| Puzzles (Word / Logic / Math) | 10 |
| Games / Simulation Exercises | 10 |
| Flowcharts / Miniatures / Models / Portfolios | 10 |
| / Demonstration / Business Plan |  |
| Snap Talk / Technical / Class Presentation | 10 |
| (Oral / Poster) / Debate / Seminar / Paper |  |
| Presentation / Publication / Viva-voce |  |
| Develop a simple decision support model | 10 |
| **Total** | **100** |