**20CE21SC – BASIC COMPUTING SKILLS**

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| **Course Category**  | Skill oriented course  | **Credits**  | 2 |
| **Course Type**  | Theory and practical | **Lecture - Tutorial - Practical**  | 0-1-2 |
| **Prerequisite**  | None | **Sessional Evaluation**  | 40 |
| **Semester End Exam. Evaluation**  | 60 |
| **Total Marks**  | 100 |

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| **CourseObjective(s)** | To understand the basic MS-Office (word, excel, power point) & Topographic plotting using appropriate software |
| **CourseOutcomes** | CO1  | Prepare professional documents using word. |
| CO2  | Modify and formatting excel work sheet. |
| CO3  | Perform mathematical calculations using excel. |
| CO4  | Calculate linear regression using excel template. |
| CO5  | Acquainted with user interface, map types, worksheet of software |
| CO6  | Prepare 3D maps, contour maps and saving, exporting and printing |
| **CourseContent** | **LIST OF EXPERIMENTS**1. Creating professional documents using Word
2. Management and archival of documents
3. Working with an Excel worksheet
4. Modifying and formatting a worksheet
5. Performing calculations using Excel
	1. Simple addition/subtraction/multiplication/division
	2. Finding minimum and maximum values
	3. Using Excel formula to compute partial correlation matrix
	4. Calculate Frequency Distribution in Excel
	5. Descriptive Statistics Using Excel
	6. Normal Distribution Using Excel
	7. Compute Correlation Matrix
	8. Compute partial correlation matrix
	9. Calculating Simple Linear Regression - Excel Template
6. Developing a workbook and printing workbook contents using Excel
7. Presenting data using charts (Bar/column/scatter charts) using Excel
8. Creating and managing presentation using Power Point
9. Topographic plotting using appropriate software(QGIS/Surfer)
	1. Introduction, User Interface, Map Types, Worksheet
	2. Gridding, Advanced Gridding
	3. 3D View
	4. Contour Maps
	5. 3D Surface Maps
	6. Combining Maps
	7. Map Properties
	8. Saving, Exporting and Printing
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**CO-PO Mapping:** 3-High Mapping, 2-Moderate Mapping, 1-Low Mapping, -- Not Mapping

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|   | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** |
| **CO1** | 1 | - | - | - | 2 | 1 | 1 | - | 2 | - | 1 | - |
| **CO2** | 2 | - | 1 | 1 | 3 | - | - | - | 2 | - | 2 | 2 |
| **CO3** | 1 | - | 1 | - | 3 | - | - | - | 2 | - | 1 | - |
| **CO4** | 2 | - | - | - | 3 | 1 | - | - | 3 | - | 2 | - |
| **CO5** | 1 | - | - | - | 2 | - | - | - | 2 | - | 1 | - |
| **CO6** | 2 | 1 | 1 | - | 3 | 1 | 2 | - | 2 | - | 3 | 2 |