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| **School: SET** | **Batch: 2021 ONWARDS** |
| **Program: B.Tech.** | **Current Academic Year: 2021-2022** |
| **Branch: CSE / IT** | **Semester: 2nd**  |
| 1 | Course Code | **CSP116** | Course Name: Design & Creativity Lab  |
| 2 | Course Title | Design & Creativity Lab (DCL) |
| 3 | Credits | 2 |
| 4 | Contact Hours (L-T-P) | 1-0-2 |
|  | Course Status | Compulsory |
| 5 | Course Objective | 1. To align student to think out of box and identify a realistic problem or project
2. To understand the significance of problem and its scope
3. To develop skills to frame small project for the defined problem
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| 6 | Course Outcomes |  Students will be able to:CO1: Identify and formulate problem statements using systematic approach for real world/proposed problems.CO2: Develop teamwork and problem-solving skills, along with the ability to communicate effectively with others.CO3: Design the problem solution as per the problem statement framed.CO4: Classify and understand project solution and design solution parameters.CO5: Fabricate the solution by using C programming/other known programming.CO6: Develop future work areas from the project outcome. |
| 7 | Course Description | In DCL, the students will learn the fundamentals of defining the problem, formulating the problem statement, identifying the required skills for developing the solution based on a given problem identified based on the understanding of the programming language studied in the previous semester or known. |
| 8 | Outline syllabus | CO Mapping |
|  | **Unit 1** | Problem Definition, Formation of Teamwork and problem solving, and Project Assignment.  | CO1, CO2 |
|  | **Unit 2** | Develop the ability to communicate effectively and identify proposed problems. |  CO2, CO3 |
|  | **Unit 3** | Design proposed solution for identified problem statement. | CO3 |
|  | **Unit 4** | Develop a solution set and obtain the appropriate results for defined parameters. | CO3, CO4 |
|  | **Unit 5** | Demonstrate and execute projects with the team. Determine future work based on the final outcome. | CO4, CO5, CO6 |
|  | The report *should include Abstract, Hardware / Software Requirement, Problem Statement, Design/Algorithm, Solution Detail. Reports.**References if any.*The presentation, report, work done during the term supported by the documentation, forms the basis of assessment. |  |
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|  | Mode of examination | Practical /Viva |  |
|  | Weight age Distribution | CA | CE (VIVA) | ETE |  |
| 25% | 25 | 50% |  |

**CO and PO Mapping**

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| S. No. | Course Outcome | Program Outcomes (PO)  |
| 1. | CO1: Identify and formulate problem statements using systematic approach for real world/proposed problems. | PO1, PO2, PO4, PO9, PO10, PO11, PO12,PSO1,PSO2,PSO3 |
| 2. | CO2: Develop teamwork and problem-solving skills, along with the ability to communicate effectively with others. | PO1, PO2, PO4, PO7, PO9, PO10, PO11, PO12 ,PSO3 |
| 3. | CO3: Design the problem solution as per the problem statement framed. | PO1, PO2, PO5, PO9, PO10, PO11, PO12, PSO1,PSO2 |
| 4. | CO4: Classify and understand project solution and design solution parameters. | PO1, PO2, PO6, PO9, PO10, PO11, PO12,PSO2 |
| 5. | CO5: Fabricate the solution by using C programming/other known programming. | PO1, PO2, PO3, PO4,PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12 PSO1,PSO2, PSO3 |
| 6. | CO6: Develop future work areas from the project outcome. | PO1, PO2, PO4, PO9, PO10, PO11, PO12,PSO3 |

**PO and PSO mapping with level of strength for Course Name** Design & Creativity Lab **(Course Code CSP116)**

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| **CO/PO Mapping**(1/2/3 indicates strength of correlation) 3-Strong, 2-Medium, 1-Low |
| Cos | Programme Outcomes(POs) |
| PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
| CO1 | 3 | 3 | - | 3 | - | - | - | - | 3 | 3 | 2 | 3 | 2 | 2 | 1 |
| CO2 | 3 | 2 | - | 3 | - | - | 2 | - | 3 | 3 | 2 | 3 |  |  | 1 |
| CO3 | 3 | 2 | - | - | 2 | - | - | - | 3 | 3 | 2 | 3 | 2 | 2 |  |
| CO4 | 3 | 3 | - | - | - | 2 | - | - | 3 | 3 | 2 | 3 |  | 2 |  |
| CO5 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 |  |
| CO6 | 3 | 3 | - | 3 | - | - | - | - | 3 | 3 | 2 | 3 |  |  | 1 |
| AvgPO attained | 3 | 2.7 | 0.34 | 1.84 | 0.67 | 0.67 | 0.84 | 0.5 | 3 | 3 | 2 | 3 | 1 | 1.4 | 0.5 |