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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 | | | | |
| 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 |