# **PROGRAMMING with C LAB**

Course Code	20ES1451	Year	II	Semester	II
Course Category	Engineering Science	Branch	EEE	Course Type	Lab
Credits	1.5	L-T-P	0-0-3	Prerequisites	
Continuous Internal Evaluation:	15	Semester End Evaluation:	35	Total Marks:	50

Course Outcomes					
Upon successful completion of the course, the student will be able to					
CO1	Apply Structured Programming/C constructs for solving problems. (L3)				
CO2	Implement programs as an individual on different IDEs/ online platforms. (L3)				
CO3	Develop an effective report based on various programs implemented.				
CO4	Analyze outputs using given constraints/test cases. (L4)				

	Contribution of Course Outcomes towards achievement of Program Outcomes &													
	Strength of correlations (3:High, 2: Medium, 1:Low)													
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3											2		
CO2					3				3					
CO3										3				
CO4		3												

## **Syllabus**

Expt. No.	Contents	Mapped CO
1	Programs on Basics	
2	Programs on Operators	
3	Programs on Decision Statements	
4	Programs on Switch operations	
5	Programs on Basic Loop operations	
6	Programs on Advanced loops	CO1,CO2
7	Programs on 1-D arrays	CO3,CO4
8	Programs on 2-D arrays	
9	Programs on Strings	
10	Sample Programs on Function	
11	Programs on Pointers and Dynamic Memory allocation	
12	Programs on Structures	

### **Learning Resources**

#### **Text Books**

1. Reema Thareja, Programming in C, Oxford University Press, AICTE Edition, 2018.

#### **Reference Books**

- 1. B. A. Forouzan and R. F. Gilberg, Computer Science: A Structured Programming Approach Using C, 3/e, Cengage Learning, 2007.
- 2. Pradip Dey, Manas Ghosh, Programming in C, Oxford University Press, AICTE Edition,
- 3. B. Gottfried, Programming with C, 3/e, Schaum's outlines, McGraw Hill (India), 2017.
- 4. Jeri R. Hanly, Ellot B. Koffman, Problem Solving and Program Design in C, 5/e, Pearson.

## e- Resources & other digital material

- 1. <a href="http://cprogramminglanguage.net/">http://cprogramminglanguage.net/</a>
- 2. https://nptel.ac.in/courses/106105085/4