

Course No.	Course Name	L-T-P - Credits	Year of Introduction
EE233	PROGRAMMING LAB	0-0-3-1	2016
Course Objectives To impart knowledge and develop skills in programming			
List of Exercises/Experiments : (Minimum 12 exercises/experiments are mandatory) <ol style="list-style-type: none"> 1. At least four simple programs using input output statements (example: area of rectangle, circle, etc) 2. At least four Simple programs using decision statements (Example: Even or odd, pass or fail) 3. At least four Programs using Control statements and decision statements (Example maximum, minimum of a given set of numbers, hcf, lcm) 4. Program to add n numbers 5. Programs to print patterns 6. Program to check whether a number is prime 7. program to generate Fibonaacii series 8. Array manipulation (searching, insertion and sorting) 9. Few programs using pointers 10. Functions Pass by value Pass by reference 11. Recursive functions (example: Fibonaacii series and factorial) 12. String manipulation – compare, copy, reverse operations 13. Matrix operations: addition multiplication, determinant and inverse 14. Reading from a file and writing to a file Merging and appending of files. 15. Solution of algebraic and transcendental equations: Bisection, Newton- Raphson method- comparison 16. Introductory programs using Python 17. Function calls in Python 			
Expected outcome. <ol style="list-style-type: none"> 1. Ability to design programs using C language 2. Ability to develop simple programs using Python 			
References: <ol style="list-style-type: none"> 1. E. Balaguruswamy, <i>Programming in ANSI C</i>, Tata McGraw Hill, New Delhi 2. Kernighan, Brian W., and Dennis M. Ritchie. <i>The C programming language</i>. Vol. 2. Englewood Cliffs: prentice-Hall, 1988. 3. Introduction to computation and programming using Python, John V. Guttag, PHI Learning, New Delhi 4. Downey, Allen, Jeffrey Elkner, and Chris Meyers. <i>How to think like a computer scientist: learning with python</i>. John Wiley 2015. 5. Lambert, Kenneth. <i>Fundamentals of Python: first programs</i>. Cengage Learning, 2011. 			