Course No.	Course Name	L-T-P - Credits	Year of Introduction
IE232	**Object Oriented Programming Lab**	**0-0-3-1**	**2016**

IE202 Object oriented programming & numerical methods

Course Objectives

- To get a clear understanding of object-oriented concepts.
- To understand object oriented programming through C++

List of Exercises/Experiments :

1. Simple C++ Programme to implement various control structures
2. Programme to understand Structure and Union
3. Programme to understand Pointer concepts
4. Function & Recursion
5. Programme to understand different function call mechanism
6. Programme to understand storage specifiers
7. Constructors and Destructors
8. Use of using this pointer using class
9. Programme to implement Inheritance and Function overriding
10. Programme to implement Polymorphism concepts
11. Programme to Overload Unary and Binary operators as member function & Non member function.
12. Programme to understand Friend function & Friend classes
13. Programme on class templates
14. Programme on Numerical solution to Differential equations.
15. Programme on Numerical solution to Interpolation
16. Programme to implement Matrix multiplication and find the Determinent using class concepts.
17. Programme on file handling concepts in C++
18. Programme to implement error handling systems in C++

Expected outcome .

• Gain the basic knowledge on Object Oriented concepts.
• Ability to develop applications using Object Oriented Programming Concepts.
• Ability to implement features of object oriented programming to solve real world problems

Text Book:

Stroustrup, Bjarne . The C++ Programming Language (Third ed.).