

This course is to train the student to develop problem solving abilities and facilitate them to build the necessary skill set and analytical abilities for developing java based software for real life problems.

**Upon completion of this course students will be able to:**

1. Develop simple java programs to demonstrate OOPs concepts.
2. Construct programs using constructor, method overloading and static function.
3. Examine reusability through inheritance, abstract class and interface concept in real time application development
4. Develop packages and understand how to fix errors using exception handling.
5. Construct window based applications using Applet, Swing and achieve database connectivity using JDBC.

#### **Lab Components**

1. Implementation of Array and flow control statement.
2. Write a Java program to count the letters, spaces, numbers and other characters of an input string.
3. Demonstrate the use of constructor or destructor.
4. Working with command line arguments.
5. Write a Java Program to implement array of objects.
6. Implementation of Single inheritance.
7. Implementation of Multilevel inheritance.
8. Write a java program to implement method overriding.
9. Write a java program to demonstrate the implementation of abstract class.
10. Write a java program to implement interface concept.
11. Create a package, add the necessary classes and import the package in java class.
12. Implementing Thread based applications & Exception Handling.
13. Write a java program to copy the contents from one file to other file.
14. Checking Minimum Bank Balance using user defined exception.
15. Working with Dialogs and Menu control.
16. Working with Panel and Layout control.
17. Database Creation for storing e-mail addresses and manipulation..
18. Creation of applet and passing parameter to applet.
19. Calculation of Electricity bill using JDBC and Applet.
20. Creation of Employee pay bill using JDBC and Swings.