



# Techno College of Engineering Agartala

An Engineering College Approved by AICTE, MHRD, Govt. of India

Affiliated to Tripura University (A Central University),

Department of Computer Science & Engineering



## List of Laboratory Experiments

Object Oriented Programming Lab							
Course Code	Hours / Week				Maximum Marks		
PC CS 409	L	T	P	C	CIA	SEE	Total
	0	0	2	1	40	60	100
Number of classes: 24 Hours			Prerequisites: ES208				
Branch: CSE			Semester: IV				
<b>Course overview:</b> The Object Oriented Programming Lab provides hands-on experience in applying object-oriented principles such as encapsulation, inheritance, polymorphism, and abstraction using Java or C++. Students will learn to design and implement modular and reusable code through class and object creation, constructors, interfaces, file handling, exception handling, and GUI programming. The lab focuses on solving real-world problems by applying object-oriented design patterns and developing efficient, maintainable software.							
<b>Course objectives:</b>  i. To understand and apply the basic concepts of object-oriented programming like classes, objects, and data abstraction. ii. To implement inheritance, polymorphism, and encapsulation for building modular and reusable programs. iii. To use constructors, method overloading, and interfaces for structured program development. iv. To handle exceptions and perform file operations using object-oriented techniques. v. To design simple GUI applications and understand event-driven programming.							
<b>Course outcomes:</b>							
CO Number	CO Description						K-level
CO-1	Inspect simple abstract data types and design implementations, using abstraction functions to document them.						K-4
CO-2	Identify features of object-oriented design such as encapsulation, polymorphism, inheritance, and composition of systems based on object identity						K-4
CO-3	Apply some common object-oriented design patterns and give examples of their use						K-4
CO-4	Design applications with an event-driven graphical user interface						K-4
Sl. No.	EXPERIMENT NAME						CO
1.	Assignments on class, constructor, overloading, inheritance, overriding						CO-1
2.	Assignments on wrapper class, arrays						CO-2



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3.	Assignments on developing interfaces- multiple inheritances, extending interfaces	CO-2
4.	Assignments on creating and accessing packages	CO-3
5.	Assignment on using third party libraries	CO-3
6.	Assignment on multithreaded programming.	CO-4