



**KLS GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI**

## **SKILL LABS**



### **Schedule of Skill labs offered at KLSGIT**

<b>Sl No</b>	<b>Department</b>	<b>Start date</b>	<b>End date</b>	<b>Title of Skill lab</b>
1	ISE	30-12-2024	03-01-2024	Elevating Object Oriented Programming Skills

### **Skill lab (Detailed schedule)**

<b>Sl No</b>	<b>Department</b>	<b>Title of Skill lab</b>	<b>Semester &amp; Division</b>	<b>Venue</b>	<b>Dates</b>	<b>Faculty name</b>	<b>Phone No</b>	<b>Email id</b>
1	ISE	Elevating Object Oriented Programming Skills	5 <sup>th</sup> sem A	Lab No. 3, 6	30-12-2024 to 03-01-2024	Dr. Kiran K. Tangod Dr. Padma Dandannavar Prof. Anusha Chogund Prof. Shrivatsa D. Perur	9448545393 9886230332 9845306014 9845371193	kirankt@git.edu padmad@git.edu apcogund@git.edu sdperur@git.edu



# SKILL LAB

ON

## Elevating Object Oriented Programming Skills For 3<sup>rd</sup> Year Students



### KLS GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI Department of Information Science and Engineering

#### Overview:

This Skill Lab is designed to introduce students to the fundamentals of object oriented programming and to develop hands-on skills in problem-solving, algorithmic thinking and object oriented programming. Through practical exercises, students will gain proficiency in the syntax and structure while applying programming concepts to real-world scenarios.



#### Mode of Conduction of each Module:

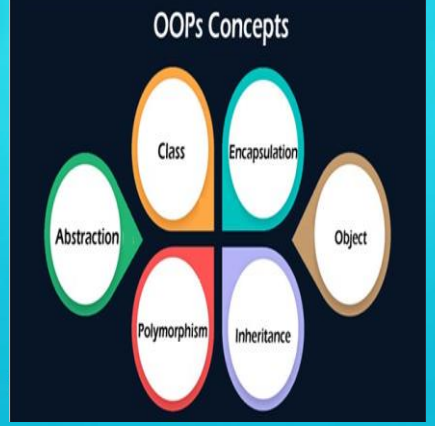
Theory: 02 Hours  
Demo: 01 Hours Lab Sessions: 03 Hours  
Total duration: 06 Hour Certification exam: 03 Hours

#### Module 1: Introduction to OOP and Basics

- Overview of Object-Oriented Programming
- Key Principles
- Basic Syntax and Structure
- Functions and Scope

#### Module 2: Classes and Objects

- Defining Classes & Creating Objects
- Class members
- Access Specifiers
- Constructor and Destructor
- Static Member Variables and Functions
- Friend Functions and Friend Classes



#### Module 3: Advanced Class Features

- Operator Overloading
- Function Overloading
- Overloading Arithmetic and Relational Operators
- Overloading Unary Operators

#### Module 4: Inheritance and Polymorphism

- Types of Inheritance
- The 'protected' Keyword
- Constructor and Destructor Calls in Inheritance
- Function Overriding and Virtual Functions
- Pure Virtual Functions and Abstract Classes

#### Terms and Conditions

- Only students who have paid a skill lab fee to the institution are eligible for the training.
- The students must maintain 90% attendance for obtaining the skill lab certificate.
- Students must attend training as per scheduled time

#### Acceptance

In order to accept and start the training program, students are required to register with the respective department. Details to be provided by the student to the department include: Name, USN, UID, Mobile No, Email id:

#### Coordinators:

Name: Dr. Kiran K. Tangod  
Phone: 9448545393  
E-mail: [kirankt@git.edu](mailto:kirankt@git.edu)

Name: Prof. Anusha Chogund  
Phone: 9845306014  
E-mail: [apcogund@git.edu](mailto:apcogund@git.edu)

Name: Dr. Padma Dandannavar  
Phone: 9886230332  
E-mail: [padmad@git.edu](mailto:padmad@git.edu)

Name: Prof. Shrivatsa D. Perur  
Phone: 9845371193  
E-mail: [sdperur@git.edu](mailto:sdperur@git.edu)

#### Outcomes

The OOP Skill Lab equips students with essential programming skills, enhancing problem-solving, and promoting efficient software design. Students gain hands-on experience in real-world coding, mastering core OOP concepts like encapsulation and inheritance. This lab prepares them for advanced studies, careers in software development, and learning other languages by building a solid foundation in object-oriented principles.

Students will be able to take up positions like Business Intelligence Analyst, Data Analyst, Power BI Developer post the completion of course.

