

# LESSON PLAN

SUB: PROGRAMMING WITH C++  
BRANCH:- COMPUTER SCIENCE & ENGG.  
SEMESTER: 3<sup>RD</sup>

NAME OF FACULTY: MONALISA SETHI (GF in CSE)



## GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2026-27

  
HOD, CSE

  
Academic Co-ordinator  
Academic Co-ordinator

  
Principal  
Govt. Polytechnic, Bhadrak

DEPARTMENT OF Computer Science & En

# LESSON PLAN

|                                                       |                                  |                                                                                                     |
|-------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Discipline: Computer Science &amp; Engineering</b> | <b>Semester: 3<sup>rd</sup>,</b> | <b>Name of the Faculty: Miss-Monalisa Sethi</b><br><b>Email ID:</b><br><b>monalisa147@gmail.com</b> |
| <b>Subject: Programming with c++</b>                  | <b>No. of Days/week: 03</b>      | <b>Start Date: 01/07/2026</b><br><b>End Date: 05/11/2027</b>                                        |

| Week | Class Day | Theory Topics                                                                      |
|------|-----------|------------------------------------------------------------------------------------|
| 1st  | 1st       | Introduction to Object Oriented Programming<br>User defined types                  |
|      | 2nd       | <ul style="list-style-type: none"> <li>Structures, unions</li> </ul>               |
|      | 3rd       | <ul style="list-style-type: none"> <li>Polymorphism, Encapsulation</li> </ul>      |
| 2nd  | 1st       | <ul style="list-style-type: none"> <li>Getting started with C++ syntax</li> </ul>  |
|      | 2nd       | <ul style="list-style-type: none"> <li>Data type, Variables</li> </ul>             |
|      | 3rd       | <ul style="list-style-type: none"> <li>Strings, Functions</li> </ul>               |
| 3rd  | 1st       | <ul style="list-style-type: none"> <li>Default values in functions</li> </ul>      |
|      | 2nd       | <ul style="list-style-type: none"> <li>Recursion, Namespaces, operators</li> </ul> |
|      | 3rd       | <ul style="list-style-type: none"> <li>Flow control, Arrays, Pointer</li> </ul>    |
| 4th  | 1st       | <ul style="list-style-type: none"> <li>Abstraction mechanism</li> </ul>            |
|      | 2nd       | <ul style="list-style-type: none"> <li>Classes, private, Public</li> </ul>         |
|      | 3rd       | <ul style="list-style-type: none"> <li>Constructor</li> </ul>                      |

|                  |     |                                                                                                                                   |
|------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------|
| 5 <sup>th</sup>  | 1st | <ul style="list-style-type: none"> <li>Member data, Member functions, Constructor, Destructor</li> </ul>                          |
|                  | 2nd | <ul style="list-style-type: none"> <li>Inline function, Friend functions</li> </ul>                                               |
|                  | 3rd | <ul style="list-style-type: none"> <li>Static members &amp; reference</li> </ul>                                                  |
| 6 <sup>th</sup>  | 1st | <ul style="list-style-type: none"> <li>Inheritance &amp; its type, Class hierarchy, Derived class</li> </ul>                      |
|                  | 2nd | <ul style="list-style-type: none"> <li>Role of Virtual base class, Base initialization using derived class constructor</li> </ul> |
|                  | 3rd | <ul style="list-style-type: none"> <li>Revision</li> </ul>                                                                        |
| 7 <sup>th</sup>  | 1st | <ul style="list-style-type: none"> <li>Polymorphism</li> </ul>                                                                    |
|                  | 2nd | <ul style="list-style-type: none"> <li>Static &amp; Dynamic binding</li> </ul>                                                    |
|                  | 3rd | <ul style="list-style-type: none"> <li>Static Polymorphism, Function overloading</li> </ul>                                       |
| 8 <sup>th</sup>  | 1st | <ul style="list-style-type: none"> <li>Dynamic Polymorphism: Object slicing</li> </ul>                                            |
|                  | 2nd | <ul style="list-style-type: none"> <li>Base class pointer, Pure virtual function</li> </ul>                                       |
|                  | 3rd | <ul style="list-style-type: none"> <li>Late binding, Abstract classes</li> </ul>                                                  |
| 9 <sup>th</sup>  | 1st | <ul style="list-style-type: none"> <li>Revision</li> </ul>                                                                        |
|                  | 2nd | <ul style="list-style-type: none"> <li>Operator overloading</li> </ul>                                                            |
|                  | 3rd | <ul style="list-style-type: none"> <li>This pointer &amp; application</li> </ul>                                                  |
| 10 <sup>th</sup> | 1st | <ul style="list-style-type: none"> <li>Operator function</li> </ul>                                                               |
|                  | 2nd | <ul style="list-style-type: none"> <li>Member Operator function</li> </ul>                                                        |
|                  | 3rd | <ul style="list-style-type: none"> <li>Non-member Operator function</li> </ul>                                                    |
| 11 <sup>th</sup> | 1st | <ul style="list-style-type: none"> <li>Operator overloading, I/O operators</li> </ul>                                             |
|                  | 2nd | <ul style="list-style-type: none"> <li>Exception handling</li> </ul>                                                              |
|                  | 3rd | <ul style="list-style-type: none"> <li>Try, Throw</li> </ul>                                                                      |
| 12 <sup>th</sup> | 1st | <ul style="list-style-type: none"> <li>Catch, Exception</li> </ul>                                                                |
|                  | 2nd | <ul style="list-style-type: none"> <li>Derived classes</li> </ul>                                                                 |
|                  | 3rd | <ul style="list-style-type: none"> <li>Function Exception declaration</li> </ul>                                                  |
| 13 <sup>th</sup> | 1st | <ul style="list-style-type: none"> <li>Unexpected exceptions</li> </ul>                                                           |
|                  | 2nd | <ul style="list-style-type: none"> <li>Revision</li> </ul>                                                                        |
|                  | 3rd | <ul style="list-style-type: none"> <li>Assessment</li> </ul>                                                                      |
| 14 <sup>th</sup> | 1st | <ul style="list-style-type: none"> <li>Revision</li> </ul>                                                                        |
|                  | 2nd | <ul style="list-style-type: none"> <li>Quiz Test</li> </ul>                                                                       |
|                  | 3rd | <ul style="list-style-type: none"> <li>Quiz Test-1</li> </ul>                                                                     |
| 15 <sup>th</sup> | 1st | <ul style="list-style-type: none"> <li>Previous year question</li> </ul>                                                          |
|                  | 2nd | <ul style="list-style-type: none"> <li>Previous year question</li> </ul>                                                          |
|                  | 3rd | <ul style="list-style-type: none"> <li>Previous year question</li> </ul>                                                          |

Monalisa sethi  
Signature of faculty