

## OBJECT ORIENTED PROGRAMMING (ETCS-210)

The prime purpose of **C++** programming was to add **Object Orientation** to the **C** programming language, which is in itself one of the most powerful programming language. The main aim of OPP is to bind together the data and the functions that operate on them so that no other part of the code can access this data except Function.

### SYLLABUS

<u>UNIT -3<sup>rd</sup></u>	<u>UNIT-4<sup>th</sup></u>
Inheritance, Class Hierarchy, Derivation- public, private& protected.	Standard C++ classes, using multiple inheritance, persistent objects.
Aggregation, composition vs classification hierarchies.	Stream and files, namespaces, exceptions handling, generic classes.
Polymorphism, Categorization of polymorphism techniques, method polymorphism, polymorphism by parameter, operator overloading, parametric polymorphism.	Standard template library: Library organization and containers, standard containers, algorithm and function objects, iteration and allocators.
Generic Function- template function.	String and stream manipulators, user defined manipulators.
Function overloading, function overriding, overriding inheritance methods	Vectors, valarray, slice, generalized numeric algorithm.
<u>Run time Polymorphism</u>	