



MERI College of Engineering & Technology  
(MERI-CET)

Session: 2020-2021  
Department: CSE  
Subject code: OEC-ECE317G

Course- ECE  
Semester: 5<sup>th</sup>  
Faculty Name : Ms. PREETI

**lesson plan**

Name of the Faculty : Ms. Preeti (C++)  
Discipline : ECE  
Semester : 5<sup>th</sup>  
Subject : C++ (OEC-ECE317G)  
Lesson Plan Duration : 14 Weeks (from Aug., 2020 to Nov., 2020)

\*\* Work Load (Lecture/Practical) per week (in hours): Lectures-02.

Week	Theory	
	Lecture Day	Topic (including assignment/test)
1 <sup>st</sup>	1 <sup>st</sup>	<b>Object-Oriented Programming Concepts:</b> Introduction, comparison between procedural programming paradigm and object-oriented programming paradigm,
	2 <sup>nd</sup>	basic concepts of object oriented programming, concepts of an object and a class
2 <sup>nd</sup>	3 <sup>th</sup>	data abstraction, encapsulation, inheritance, polymorphism.
	4 <sup>th</sup>	<b>Basic Concepts of C++:</b> Structure of C++ Program, regular expressions
3 <sup>rd</sup>	6 <sup>th</sup>	Basic Data Types, Expressions and Control Structures
	7 <sup>th</sup>	<b>Functions in C++:</b> Call by Value, Call by Reference.
4 <sup>th</sup>	8 <sup>th</sup>	Recursion, Function Overloading. <b>Classes and Objects:</b> Specifying a class
	9 <sup>th</sup>	creating class objects, accessing class members,
5 <sup>th</sup>	10 <sup>th</sup>	access specifiers, static data members.
	11 <sup>th</sup>	use of const keyword, friends of a class, Assignment-1
6 <sup>th</sup>	12 <sup>th</sup>	empty classes, nested classes, local classes

	13 <sup>st</sup>	abstract classes, container classes
7 <sup>th</sup>	14 <sup>th</sup>	<b>Constructors and Destructors:</b> Need for constructors and destructors,
	15 <sup>th</sup>	copy constructor, dynamic constructors, destructors
8 <sup>th</sup>	16 <sup>th</sup>	<b>Inheritance:</b> Introduction, defining derived classes, forms of inheritance,
	17 <sup>th</sup>	virtual base classes. Assignment-2
9 <sup>th</sup>	18 <sup>nd</sup>	<b>Operator Overloading and Type Conversion:</b> Overloading operators, rules for overloading operators,
	19 <sup>rd</sup>	type conversion - basic type to class type, class type to basic type. class type to another class type
10 <sup>th</sup>	20 <sup>th</sup>	Assignment-3, <b>Virtual functions &amp; Polymorphism:</b>
	21 <sup>th</sup>	Concept of binding, early binding and late binding, virtual functions,
11 <sup>th</sup>	22 <sup>th</sup>	pure virtual functions, abstract classes
	23 <sup>nd</sup>	virtual destructors.
12 <sup>th</sup>	24 <sup>th</sup>	<b>Exception Handling:</b> Review of traditional error handling,
	25 <sup>th</sup>	basics of exception handling, exception handling mechanism,
13 <sup>th</sup>	26 <sup>th</sup>	throwing mechanism, catching mechanism,
	27 <sup>th</sup>	rethrowing an exception, specifying exceptions.
14 <sup>th</sup>	28 <sup>nd</sup>	Revision of syllabus
	29 <sup>rd</sup>	Revision of syllabus