

**Course No: MCA-308-GE**  
**Course Title: Internet and Web Designing**

**Unit-I:**

Introduction to Internet, Internet Services, WWW, Web Browsers and Search Engines. HTML: Understanding HTML, Create a Web Page, Linking to other Web Pages, Publishing HTML Pages, Text Alignment and Lists, Text Formatting Fonts Control, Hyper Links and link within a Page, Creating HTML Forms, Creating Web Page Graphics, Putting Graphics on a Web Page, Custom Backgrounds and Colors.

**Unit-II:**

Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling (Background, Text Format, Controlling Fonts), Working with block elements and objects, Working with Lists and Tables, CSS Id and Class, Box Model (Introduction, Border properties, Padding Properties, Margin properties), CSS Advanced (Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute selector), CSS Color, Creating page Layout and Site Designs.

**Unit III:**

Introduction to JavaScript, Declaring and Using Variables in JavaScript, Operators, Operator precedence & Constants in JavaScript, Using Conditional Statements in JavaScript, Using Loops in JavaScript, Using Procedures & Functions in JavaScript.

**Reference Books:**

- 1. Beginning HTML, XHTML, CSS, JavaScript by Jon Duckett (Wiley India)**
- 2. Sams Teach yourself HTML, CSS JavaScript by Sams Publications**
- 3. Learning Web Design by Jennifer Niederst Robbins published by O'Reilly**
- 4. Web Design with HTML, CSS and JavaScript by Jon Duckett (Wiley India)**

**Course No: MCA-309-GE**  
**Course Title: Object Oriented Programming**

**Unit I:**

Object oriented programming concepts - objects - classes - methods and messages - abstraction and encapsulation - inheritance - abstract classes - polymorphism. Introduction to C++ - classes - access specifiers - function and data members - default arguments - const and volatile functions - static members - Objects - pointers and objects.

**Unit-II:**

Constructors - default constructor - Parameterized constructors - Constructor with dynamic allocation - copy constructor - destructors - operator overloading - overloading through friend functions - overloading the assignment operator - type conversion - explicit constructor, nested classes.

**Unit III:**

Inheritance - public, private, and protected derivations - multiple inheritance - virtual base class - abstract class - composite objects Runtime polymorphism - virtual functions - pure virtual functions Function and class templates - Exception handling - try-catch-throw paradigm, User defined exceptions.

**Text book:**

1. **Object Oriented Programming in C++ by Robert Lafore, Techmedia Publication.**

**Reference Books:**

1. **The complete reference C – by Herbert shieldt Tata McGraw Hill Publication.**
2. **B. Trivedi, "Programming with ANSI C++", Oxford University Press, 2007.**
3. **Ira Pohl, "Object Oriented Programming using C++", Pearson Education, Second Edition Reprint 2004.**
4. **S. B. Lippman, Josee Lajoie, Barbara E. Moo, "C++ Primer", Fourth Edition, Pearson Education, 2005.**
5. **B. Stroustrup, "The C++ Programming language", Third edition, Pearson Education, 2004.**