

C++ Syllabus

- Introduction to cpp
- modern cpp and the standard cpp
- Installation and setup
- Compilation process
- what is compiler
- compiler vs interpreter
- Building CPP programs
- What is compiler errors
- what is compiler warnings
- what is linker?
- what is linker errors?
- what is runtime errors
- what is logic errors

- Overview of the structure of cpp program
- #include preprocessor directives
- comments
- the main() function
- namespaces
- basic input and output
- variables and constants
 - what is variables
 - declaring and initializing variables
 - global variables
 - C++ built-in primitives data types
 - size of a variables
 - what is constant
 - declaring and using a constant
- Arrays
 - What is an array
 - declaring and initializing arrays
 - accessing and modifying array elements
 - accessing array elements
 - Multidimensional arrays
- Operators
- Control flow statements
 - if
 - if else

- nested if else
- loops
 - ◆ for loop
 - ◆ while loop
 - ◆ do while loop
 - ◆ nested loopings
- Strings
- classes and objects
- inheritance
- polymorphism
- functional prograaming
- structs
- pointers