Certificate Course in Object Oriented Programming through C++

Objective of the Course:

The course is designed to provide complete knowledge of Object Oriented Programming through C++ and to enhance the programming skills of the students by giving practical assignments to be done in labs.

Learning Outcomes:

After the completion of the course, the students will gain knowledge about Object Oriented Programming through C++. They can make their own Applications/Projects using C++ and can be deputed as a C++ programmer in IT companies.

Duration of the Course: 60 hrs.
(In hours)

Minimum Eligibility Criteria: Basic Knowledge of any programming Language
and Prerequisite, if any

Outline of Course

S. No	Topic	Hours
1.	C++ overview	3 hrs
2.	Functions and variables	3 hrs
3.	Classes in C++	3 hrs
4.	Operator overloading	2 hrs
5.	Initialization and Assignment	3 hrs
6.	Storage Management	2 hrs
7.	Inheritance	3 hrs
8.	Polymorphism	3 hrs
9.	Input and Output in C++ Programs	2 hrs
10.	Exceptions	3 hrs
11.	Templates	3 hrs
	Theory / Lecture Hours:	30 hrs
	Practical / Tutorial / Lecture Hours:	30 hrs
	Total Hours:	60 hrs

Books Recommended for Reading and Reference:
- Object Oriented Programming with C++ by E. Balaguruswamy
- Practical programming in C++ by Steve Oualline
- The C++ programming language by Bjarne Stroustrup