

# Object-Oriented C++

*lundi 13 avril 2026 14:00 (3h 30m)*

Get familiar with the object-oriented programming with C++. The lectures and hands-on aim to prepare students to use and/or contribute to large C++-based projects, such as Geant4.

- Introduction to object-oriented methodology
- Class definition and implementation
- Class data members and member functions/methods
- Static data members, member functions/methods
- Base class and derived class
- Virtual, pure virtual functions
- C++11/17 features: auto, range for loop, ...

Prerequisites: basic knowledge of the C++ syntax and standard library (if, loops, functions, pointers, references, iostream, string, vector).

Detailed program and course material:

<https://geant4-ed-project.pages.in2p3.fr/oo-cpp-web/>

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