

B.4 — Introduction to C++20

 ALEX  OCTOBER 13, 2023

What is C++20?

In February of 2020, the [ISO \(International Organization for Standardization\)](https://www.iso.org/home.html) (<https://www.iso.org/home.html>) approved a new version of C++, called C++20. C++20 contains the most changes to the language since C++11.

New improvements in C++20

For your interest, here's a list of the major changes that C++20 adds. Note that this list is not comprehensive, but rather intended to highlight some of the key changes of interest.

- Abbreviated function templates via auto parameters ([11.8 -- Function templates with multiple template types](#))
- Chrono extensions for calendar and time zone support (no tutorial yet)
- Concepts, which allow you to put constraints on template parameters (no tutorial yet)
- Constexpr virtual functions, unions, try, catch, dynamic_cast, and typeid (no tutorial yet)
- constexpr keyword, to assert that a variable has static initialization (no tutorial yet)
- Coroutines (no tutorial yet)
- Designated initializers ([13.6 -- Struct aggregate initialization](#))
- Immediate functions using the constexpr keyword ([5.8 -- Constexpr and constexpr functions](#))
- Modules, a replacement for #include (no tutorial yet)
- Ranges (no tutorial yet)
- std::erase (no tutorial yet)
- std::make_shared for arrays (no tutorial yet)
- std::map::contains() (no tutorial yet)
- std::span (no tutorial yet)
- String formatting library (no tutorial yet, see <https://en.cppreference.com/w/cpp/utility/format>)
- String literals as template parameters (no tutorial yet)
- Three-way comparison using the spaceship operator <=> (no tutorial yet)
- Using scoped enums (no tutorial yet)
- Views (no tutorial yet)



[Next lesson](#)

C.1 [The end?](#)



[Back to table of contents](#)



[Previous lesson](#)

B.3 [Introduction to C++17](#)

Leave a comment...

 Name*


 Email* 

Notify me about replies:



POST COMMENT

 Find a mistake? Leave a comment above!

 Avatars from <https://gravatar.com/> are connected to your provided email address.

18 COMMENTS

Newest ▼

We and our partners share information on your use of this website to help improve your experience.

Do not sell my info: ☐

OKAY

×