Scientific C++ Programming (Basics)

Module-No./Abbreviation	Credits	Workload	Term	Frequency	Duration
CE-W09/SCPB	3 CP	90 h	1st Sem.	Winter term	1 Semester

Courses	Contact hours	Self-Study	Group Size:
Scientific C++ Programming (Basics)	2 SWS (30 h)	60 h	No Restrictions

Prerequisites

-

Learning goals / Competences:

After successfully completing the module, the students

- are familiar with basic programming concepts and constructs in C++,
- are able to design and develop C++ applications and to work with C++ environments,
- can review and contribute to basic C++ projects.

Content

The lecture provides an introduction to C++ programming. Basics programming concepts such as types, statements, functions, pointers, memory management and data structures are introduced. Best practices as well as the organization and development of C++ projects are discussed. An introduction to C++ compilers, debugging concepts and development tools is provided.

In hands-on sessions, programming exercises are used to discuss and illustrate the presented content.

Teaching methods / Language

Block course (equiv. to 2 SWS) / English

Mode of assessment

Written examination (120 min., 100%)

Requirement for the award of credit points

Passed final module examination

Module applicability

-

Weight of the mark for the final score

-

Module coordinator and lecturer(s)

Prof. Dr. A. Vogel, Assistants

Further information