

Extension Curriculum “Fundamentals for Computational Science” (18 ECTS)

You choose according to your bachelor’s programme:

Alternative group of compulsory modules A (18 ECTS)

(for students of a bachelor’s programme in Natural Sciences, e.g., Astronomy, Biology, Chemistry, Meteorology, Pharmacy and Physics)

Compulsory module Mathematics (PM-Math) 6 ECTS:

1 course totalling 6 ECTS has to be completed. Depending on the offer you can choose from the following:

- Linear Algebra for Computational Science: VU, pi, 6 ECTS, 4 SWS
- Analysis for Computational Science: VU, pi, 6 ECTS, 4 SWS

Compulsory module Computer Science A (PM-InfA) 12 ECTS:

2 courses totalling 12 ECTS have to be completed. Depending on the offer you can choose from the following:

- VU Programming: pi, 6 ECTS, 4 SWS
OR VU Introduction to C/C++ programming for Physicists, pi, 7 ECTS, 4 SWS
- VU Algorithms and Data Structures: pi, 6 ECTS, 4 SWS
- VU Database Systems: pi, 6 ECTS, 4 SWS

OR

Alternative group of compulsory modules B (18 ECTS)

(for students of the bachelor’s programme Mathematics)

Compulsory module Computer Science B (PM-InfB) 6 ECTS:

1 course totalling 6 ECTS has to be completed. Depending on the offer you can choose from the following:

- VU Algorithms and Data Structures: pi, 6 ECTS, 4 SWS
- VU Database Systems: pi, 6 ECTS, 4 SWS

Compulsory module Basic Knowledge of Natural Sciences (PM-Basis) 12 ECTS:

Courses totalling 12 ECTS have to be completed. Depending on the offer you can choose courses (npi, pi) from the following fields: Astronomy, Biology, Chemistry, Meteorology, Pharmacy und Physics. The courses in consideration are listed in u:find.

OR

Alternative group of compulsory modules C (18 ECTS)

(for students of the bachelor’s programme Computer Science)

Compulsory module Mathematics (PM-Math) 6 ECTS:

1 course totalling 6 ECTS has to be completed. Depending on the offer you can choose from the following:

- Linear Algebra for Computational Science: VU, pi, 6 ECTS, 4 SWS
- Analysis for Computational Science: VU, pi, 6 ECTS, 4 SWS

Compulsory module Basic Knowledge of Natural Sciences (PM-Basis) 12 ECTS:

Courses totalling 12 ECTS have to be completed. Depending on the offer you can choose courses (npi, pi) from the following fields: Astronomy, Biology, Chemistry, Meteorology, Pharmacy und Physics. The courses in consideration are listed in u:find.

Depending on the offer students of other bachelor’s programmes can choose one of the three alternative groups of compulsory modules.