Computational Sciences

Using computational mathematical approaches to study scientific phenomena
Computer Science
algorithms, programming skills, data analysis, ...

Natural Science
Chemistry, Physics, Geosciences, Meteorology

Computational Science
simulating, modelling, predicting scientific phenomena
Interdisciplinary Master’s degree

- wide range of techniques and methods in modern computer-aided natural sciences
- Complex and current scientific phenomena and issues
- Language: English + some electives in German (more flexibility)
- Duration: 4 semesters (2 years)
- Programme start in winter term only
- 1st semester admissions only
Synchronisation
Scientific Computing
Specialisation
Master’s Thesis

Each contributing 30 CP!
Scientific Computing

Specialisation

Master's Thesis

Synchronisation

B. Sc. Engineering Sciences?

B. Sc. Physics?

B. Sc. Mathematics?

What is your background?

B. Sc. Meteorology?

B. Sc. Chemistry?

B. Sc. Geological Sciences?
Scientific Computing

Synchronisation

Specialisation

Master’s Thesis

Numerics

Statistics

Foster your skills!

Computer Science
Specialise!

Molecular Sciences
- Quantum chemistry
- Molecular dynamics
- Biotechnology
- Nanotechnology
- Pharmaceutics
- ...

Geosciences
- Hydrogeology
- Mineralogy
- Geochemistry
- Planetology
- Paleontology
- ...

Atmospheric Sciences
- Weather dynamics
- Climate diagnosis
- Atmospheric flows
- Meteorology
- Fluid numerics
- ...

Scientific Computing

Specialisation

Master's Thesis

Image Credit: Prof. Dr. Rupert Klein, Prof. Dr. Frank Noé, Prof. Dr. Georg Kaufmann
Synchronisation
Scientific Computing
Specialisation
Master’s Thesis

Finish it up!
Exemplary courses of studies

BSc Chemistry + Specialisation in Molecular Sciences

1st semester
- Computational Sciences
- Synchronisierung Mathematik

2nd semester
- Computational Statistical Physics I A
- Computer Science and Object-Oriented Programming B (lecture + exercise)
- Density Functional Theory

3rd semester
- Research internship E
- Computer Science and Object-Oriented Programming B (seminar)
- Molecular Simulation I
- Selected topics in theoretical computational sciences
- Quantum-chemical correlation methods

4th semester
- Master Thesis
Exemplary courses of studies

BSc Engineering Sciences + Specialisation in Geosciences

1st semester
- Computational Sciences

2nd semester
- Computational Statistical Physics I A

3rd semester
- Computer Science and Functional Programming B
- Research internship C

4th semester
- Master Thesis
- Thermodynamics and Kinetics of Geological Processes
- Selected topics in theoretical computational sciences
- Seismik II
- Geophysics II
Check out our website!

compsci.fu-berlin.de/en/index.html
Contact and links

- Study regulations
- Admission statutes

Contact me (Programme office):
info@compsci.fu-berlin.de

Student Service Center (SCC):
info-service@fu-berlin.de

Apply until the 31st of May!
Thank you for your interest!

Prof. Dr. Felix Höfling  
*Current head of the Examination Board*

Prof. Dr. Beate Paulus  
*Current head of the Joint Commission*

Dr. Jan Felix Witte  
*Programme coordinator*  
*At your service!*