Master’s Program in Computer Science (Informatik)

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Faculty IV - Electrical Engineering and Computer Science

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Faculty IV in Numbers

- Around 70 professors and more than 600 research associates. (PhD students, postdocs,...)
- Over 6000 students, 30 percent from outside Germany.
- Around 40 million Euro external research funding every year.

Formally structured into six institutes:
- Institute of Energy and Automation Technology
- Institute of High-Frequency and Semiconductor System Technologies
- Institute of Telecommunication Systems
- Institute of Computer Engineering and Microelectronics
- Institute of Software Engineering and Theoretical Computer Science
- Institute of Commercial Information Technologies and Quantitative Methods
Institutions Closely Connected to Faculty IV

- Einstein Center Digital Future (ECDF)
- Berlin Big Data Center (BBDC)
- Bernstein Center for Computational Neuroscience (BCCN), part of Einstein Center for Neuroscience
- Berlin Daimler Center for Automotive Information Technology Innovations (DCAITI)
- Fraunhofer-Institute FOKUS
- Telekom Innovation Laboratories (T-Labs)
- ...

Moreover, there are numerous basic research projects funded by the German Research Foundation (DFG) and similar funding agencies (ERC, BMBF, ...), typically directly related with the various research groups and to be found on their respective web pages.
Master’s programs at Faculty IV

- Automotive Systems
- Computational Neuroscience
- Computer Engineering
- **Computer Science (Informatik)**
- Elektrotechnik / Electrical Engineering
- ICT Innovation
- Information Systems Management (Wirtschaftsinformatik)
Kahoot!

• Access www.kahoot.it via a web browser.
• Enter the PIN number of the “game“.
• Choose a “socially adequate“ acronym.
• Participate!
# Master’s program Computer Science – Structure

<table>
<thead>
<tr>
<th>Semester</th>
<th>Compulsory Electives</th>
<th>Compulsory Electives</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st semester</td>
<td>Study area</td>
<td>Study areas</td>
<td></td>
</tr>
<tr>
<td>30 CP</td>
<td>30-42 CP</td>
<td>18-36 CP</td>
<td>24-30 CP</td>
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<tr>
<td>2nd semester</td>
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<tr>
<td>30 CP</td>
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<tr>
<td>3rd semester</td>
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<tr>
<td>30 CP</td>
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<tr>
<td>4th semester</td>
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<td>Master’s thesis</td>
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<tr>
<td>30 CP</td>
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<td>30 CP</td>
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</table>

At most 30 CP will *not* be considered for determining the final grade:
- 12 CP of these must come from the electives
- a quarter of your grades (the worst ones) is ignored for the final grade
- Note: grade of master’s thesis is always taken into account for final grade!
What is a Study Area?

A study area...

- accumulates modules of several chairs (Fachgebiete) under a specific focus to provide a professional deepening and profiling
- offers a better orientation within the module offerings of Faculty IV
Master's Programs including Study Areas

- Electrical Engineering (ET)
- Computer Science (Informatik) (CS(I))
- Computer Engineering (CE)
- Information Systems Management (Wirtschaftsinformatik) (ISM)
Computer Science (Informatik)

60-66 CP in the following study areas:

- Data and Software Engineering
- Embedded Systems and Computer Architecture
- Foundations of Computing
- Cognitive Systems
- Digital Media and Human-Computer Interaction
- Distributed Systems and Networks

30-42 CP in one study area (major)
18-36 CP in the remaining study areas plus study area Information Systems

At least one project (≥ 9 CP) and one seminar.
Useful Link

Quick access:

184947
Where to find my Courses?

... find modules:
  • MTS (Modultransfersystem)

... find courses:
  • LSF Vorlesungsverzeichnis for time and room information
  • websites

... connect:
  • ISIS courses for the study areas
    • Foundations of Computing
    • Data and Software Engineering
  • more soon ...
Master’s Tracks

There are some tracks that describe possibilities how to organize the study program with a particular focus.

**Note:** These are only suggestions!

It is not necessary to follow any of these.

A very partial list...

- Science of Intelligence
- Cognitive Systems
- Data Analytics
- ...

Increase of track proposals is planned.
Further Advice

• Student Advisory Service
  studienberatung-cs@eeecs.tu-berlin.de; Quick Access 147510

• ZiiK – Centre for International and Intercultural Communication Counselling for international students
  ziiik.tu-berlin.de; Quick Access: 88939

• Examination Board
  eb-cs@eeecs.tu-berlin.de; Quick Access: 185486

• Student Initiative of Faculty IV - Freitagsrunde
  www.freitagsrunde.org

• ISIS course „EECS Studium“

• Ausbildungskommission (six students, three professors, three research associates)
  www.eecs.tu-berlin.de/eecs/ausbildungskommission/
Study Abroad Programs

• Programs with International Affairs, Student Mobility and International Student Counselling (INT SB) – Quick Access 5190
  • Exchange Programs Europe / Erasmus+
  • Exchange Programs Overseas

• Exchange programs with Faculty IV – Quick Access 150631
  • i.a. Shanghai Jiao Tong University (China), Universidade Federal do Rio Grande de Sul (UFRGS), Pontifícia Universidade Católica do Rio Grande do Sul PUCRS (Brasil), Norwegian University of Science and Technology (NTNU), Centre for Digital Media at Simon Fraser University (Canada)
  • Subject specific!
  • Contact at Faculty IV: Wolfgang Brandenburg, Quick Access 147520
Final Remarks

• Make sure your TU Email reaches you; check it regularly!
• There is a lot of freedom and little obligations in doing a CS Master at TU Berlin: Get organized and make your choice!
• Getting a closer look (entry points are the web pages) at some chairs for getting a feeling in which direction you want to specialize; it may also help to attend research seminars of the respective groups.
• Doing a Master also means to get close to current research!
• Don't forget: You also need to successfully attend a seminar and a project for getting the degree.

Enjoy studying in a scientifically rich and colorful environment!