## Structure of MSc Program

<table>
<thead>
<tr>
<th>1st year, 60 CP</th>
<th>2nd year, 60 CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models of Neural Systems, 12 CP</td>
<td>Courses on Advanced Topics, 10 CP</td>
</tr>
<tr>
<td>Models of Higher Brain Functions, 12 CP</td>
<td>Lab Rotations (three Projects), 3 x 9 CP</td>
</tr>
<tr>
<td>Acquisition and Analysis of Neural Data, 12 CP</td>
<td>Master Thesis, 20 CP</td>
</tr>
<tr>
<td>Machine Intelligence, 12 CP</td>
<td>Ethical Issues, 3 CP</td>
</tr>
<tr>
<td>Programming Course and Project, 6 CP</td>
<td></td>
</tr>
<tr>
<td>Individual Studies, 6 CP</td>
<td></td>
</tr>
</tbody>
</table>

## Structure of PhD Program

<table>
<thead>
<tr>
<th>1st – 3rd year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis Research</td>
</tr>
<tr>
<td>Courses on Advanced Topics, 15 CP</td>
</tr>
<tr>
<td>Soft Skills, 10 CP</td>
</tr>
</tbody>
</table>

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## Master and PhD Program

### Computational Neuroscience

### Contact

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Computational Neuroscience is a young, growing discipline within the exciting field of neuroscience. It uses theoretical approaches from a variety of disciplines including mathematics, physics, computer science, and engineering to understand the brain. Computational Neuroscience integrates experiment, data analysis and modeling.

The Bernstein Center for Computational Neuroscience Berlin (BCCN Berlin) comprises research groups working from the single cell level up to the macroscopic level, both experimentally and theoretically. It offers a unique scientific environment to the students within the program.

The accredited Master Program offers students the opportunity to work early in their career in a cutting edge interdisciplinary research field. The program currently offers 15 places with an excellent teacher to student ratio and a sense of familiarity among students. The Master's degree is jointly awarded by the Technische Universität Berlin and the Humboldt Universität zu Berlin.

Students of the PhD Program work on interdisciplinary research projects covering a broad range of topics and methods. They benefit from structured supervision and of a teaching program, including both courses on advanced topics and training on general skills. They are embedded in a scientific network where they regularly meet international scientists from their field of research and are involved in cooperations with other neuroscience graduate programs in Berlin.

Application MSc and PhD
All students who are interested in neuroscience and have a strong mathematical background are welcome to apply. In accordance with the interdisciplinary nature of Computational Neuroscience the program encourages students from diverse disciplines such as natural sciences, engineering, or mathematics to apply. The application should include:

- A letter describing why you want to study computational neuroscience at the Bernstein Center Berlin
- A CV including activities and experiences relevant for the studies
- Copies of certificates and transcripts of records for previous studies
- Two letters of recommendation
- A bachelor's degree or equivalent (for the MSc program)
- A master's degree or equivalent (for the PhD program)

MSc Program only
- TOEFL test or equivalent certificate of proficiency in English (non-native speakers only)
- Proof of mathematical knowledge, i.e. 24 ECTS each in analysis, linear algebra, and probability theory/statistics
- A completed application form
- Students have to submit their documents to www.uni-assist.de online as well as send hard copies

Finance & Mentoring

Application deadline: March 15
Beginning of Program: October
Duration MSc Program: 2 years
Duration PhD Program: 3 years
Language of instruction: English

No Tuition Fees
There are no tuition fees. Students have to pay an enrollment fee of approximately €300.00 per semester which includes a ticket for the public transport system. Berlin offers affordable high-quality life: housing is on average €330.00 per month and living costs range between €300.00 and €400.00.

Mentoring
Each MSc student has a mentor who gives advice in all academic matters.
Each PhD student has two supervisors with complementary expertises. Once a year students meet with the PhD advisory board to discuss their scientific progress.
The program’s coordination office offers help in all matters, e.g. visa affairs, accommodation, finance, administration, translations, language courses, studies, life in Berlin etc.

The BCCN Berlin
The BCCN Berlin integrates research and teaching activities at the Charité-Universitätsmedizin Berlin, Freie Universität Berlin, Humboldt-Universität zu Berlin, Technische Universität Berlin, the Max-Delbrück-Center, and the Universität Potsdam.

Please check for updates: www.computational-neuroscience-berlin.de

Excellently equipped labs situated in a beautiful, heritage listed campus

Photography
Building: BCCN Berlin, M. Franke
Lecture room: HU Berlin, B. Prusowski
Students on Campus: BCCN Berlin, F. Bessmann