NEUROSCIENCE - DOCTOR OF PHILOSOPHY (PHD)

The neuroscience community at CU Boulder is made up of over 80 faculty and research associates rostered in 13 departments and institutes. Neuroscience activities on the campus are coordinated by the Center for Neuroscience.

The graduate PhD program in neuroscience is an interdepartmental program currently consisting of eight tracks to a PhD:

- Behavioral Genetics (Integrative Physiology, Psychology & Neuroscience);
- Behavioral Neuroscience (Psychology & Neuroscience);
- Clinical Neuroscience (Psychology & Neuroscience);
- Cognitive Neuroscience (Psychology & Neuroscience);
- Social Neuroscience (Psychology & Neuroscience);
- Integrative Physiological Neuroscience (Integrative Physiology);
- Molecular, Cellular and Developmental Neuroscience (Molecular, Cellular and Developmental Biology); or
- Speech, Language and Hearing Neurosciences (Speech, Language and Hearing Sciences).

Students apply for admission to one of the participating departments, which determines whether to admit the student to CU Boulder and provide financial support. Once in residence, students enter the neuroscience PhD program while still maintaining their "home" in the department to which they were admitted. They receive a PhD that lists both their home department and neuroscience.

The neuroscience curriculum includes a year-long intensive core course, graduate seminar courses linked to an invited speaker series and wide-ranging neuroscience courses offered by many departments and institutes across campus.

Potential applicants are encouraged to visit the Center for Neuroscience (http://www.colorado.edu/neuroscienceprogram) website, which provides detailed information on the program, application process, courses, faculty and current trainees.

Triple Degree Program

Cognitive Neuroscience Combined PhD

Graduate students in good standing in one of the following participating academic units may apply to earn a combined PhD with cognitive science, neuroscience and their core discipline:

- Psychology and Neuroscience
- Philosophy
- Computer Science
- Linguistics
- Speech, Language and Hearing Sciences
- Education
- Architecture and Planning

Students interested in the combined PhD with cognitive science and neuroscience must meet course and thesis requirements. The student’s thesis advisor must be a participating faculty member of the cognitive neuroscience faculty. To enroll in this triple degree, you must enroll in the neuroscience program and the cognitive science program.

For more information, visit the Institute of Cognitive Science's Cognitive Neuroscience Combined PhD (http://www.colorado.edu/ics/graduate-programs/cognitive-neuroscience-combined-phd) webpage.

Requirements

All students are admitted with the expectation that they will work toward the PhD degree. Many students receive a Master of Arts degree in the course of working toward the PhD. Students who receive the PhD degree must demonstrate that they are proficient in some broad subject of learning and that they can critically evaluate work in this field; furthermore, they must show the ability to work independently in their chosen field and must make an original contribution of significance to the advancement of knowledge.

In the first year of graduate study, all psychology graduate students enroll in a two-semester graduate statistical sequence. There is a first-year research requirement that starts the student on an active program of research. The student also must enroll in a sequence of courses designed to give exposure to various research topics and methods.

Required Courses and Semester Credit Hours

<table>
<thead>
<tr>
<th>Required Neuroscience Core Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>NRSC 5100 Introduction to Neuroscience I 1</td>
<td>2-5</td>
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<tr>
<td>NRSC 5110 Introduction to Neuroscience II</td>
<td>3</td>
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<tr>
<td>NRSC 6100 Advances in Neuroscience Seminar (three semesters, 2 credits per semester)</td>
<td>6</td>
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<tr>
<th>Required Fundamentals of Neuroscience Depth Courses</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Choose a minimum of 3 additional neuroscience-related courses (2-3 credit hours per course). 2</td>
<td>6-9</td>
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<tr>
<td>Neuroscience-Related Discipline Specialization</td>
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</table>

Total Credit Hours

28-34

1. Advanced students take this course for 2 credits; students without advanced preparation take it for 5 credit hours.
2. For a list of approved neuroscience courses, visit the Neuroscience PhD Program (http://www.colorado.edu/neuroscienceprogram/phdrequirements.html) webpage.

Before admission to candidacy for the PhD degree, the student must pass a comprehensive examination in the field of concentration and related fields. This examination tests the student mastery of a broad field of knowledge, not merely the formal course work completed.

A variety of advanced research seminars are taught on a regular basis. Students are required to be enrolled in at least one substantive course in the department each semester until the comprehensive examinations have been successfully completed. Upon completing the comprehensive, students engage in the dissertation research, culminating in a public oral defense.

Potential applicants are encouraged to visit the Center for Neuroscience website, which provides detailed information on the program, application process, courses, faculty and current trainees.