NEUROSCIENCE, BACHELOR OF SCIENCE/MASTER OF SCIENCE

BS/MS Program

Undergraduate students in the Krieger School of Arts and Sciences may pursue a BS/MS in neuroscience, which involves a year of intense research and seminars in addition to courses for the major. There are options for completing the program in 4, 4.5, or 5 years.

The principal aim of the BS/MS program is to allow students with a serious interest and commitment to pursuing research in a future MD, MD/PhD, or PhD program to spend a year conducting laboratory research full-time. Students are expected to concentrate fully on their research, attend seminars and journal clubs, and write extensively about their research and related topics.

The BS/MS program is structured to provide students with a genuine, intensive research experience in an area of systems neuroscience, cognitive neuroscience, or cellular and molecular neuroscience.

The typical candidate is a junior or senior who has completed all required courses for the major and has a major GPA of at least 3.5. Applications are accepted each semester when the program administrator sends an email with specific due dates and requirements to students. Accepted students begin their research year the following semester. The program covers 50 percent of the tuition cost for a student once they have completed 8 semesters of undergraduate academic coursework.

Requirements for the BS/MS Degree

Current JHU undergraduate Neuroscience majors who wish to apply for the BS/MS Program in their junior or senior year must meet the following minimum requirements (prior to applying):

- A minimum 3.5 GPA in all required courses for the undergraduate major and cumulative GPA of 3.5.
- Completion of all courses required, including 6 credits of research, for the JHU BS degree in Neuroscience.
- Completion of all BS degree requirements including University Degree Requirements, BS in Neuroscience Requirements, 100 credits completed at JHU and 120 minimum total credits must be completed prior to matriculating into the program the first semester.

Students in the BS/MS program must complete all requirements for the BS degree in neuroscience, as well as a total of 43 credits of advanced and specialized courses to complete the MS degree. The additional requirements for the MS degree are as follows:

Advanced Seminars in Neuroscience (6 credits)

The Advanced Seminar in Neuroscience is offered in the fall and spring terms.

Final Spring Courses (12 credits)

Degree requirements include 12 credits of additional advanced course work (300-level or above). Courses must be related to the study of neuroscience and ideally focused on the student's concentration of study and area of research. Students may choose courses from the approved list of undergraduate advanced courses. (In addition, up to six additional credits of the Advanced Seminar in Neuroscience, and/or statistics courses, graduate courses and seminars may be taken with the approval of the program director.)

Mentored Research (24 credits)

During the research year, students will complete a total of 24 credits of mentored research. Students must complete nine credits of research in a spring academic term, six in the summer and an additional nine in the fall.

BS/MS Thesis Project (formerly Commencement Project) (1 credit)

After completing the research year, students must register for a one-credit independent study course intended to track the progress and defense of the student's final research project.

Writing Requirement

Writing is an integral part of scientific work; accordingly, one aim of the mentored research year is to train students in scientific writing. BS/MS students prepare a research proposal for admission to the program, as well as a thesis in scientific journal article format. Students are required to write one brief (~10 double-spaced pages) review paper in each semester of their research year.

Note: This master's degree is only open to current Johns Hopkins University undergraduate students pursuing a major in neuroscience.