

PhD in Neuroscience

Admission Requirements

Applicants are considered on an individual basis. Transcripts of all undergraduate and any graduate work must be submitted. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

- **Baccalaureate Field** No restrictions. Prior academic work in the following disciplines is strongly recommended:
 - Biology (8 hours)—introductory biology plus laboratory
 - Chemistry (16 hours)—general chemistry and organic chemistry, plus laboratories or biochemistry (3–4 hours)
 - Physics (6 hours)—introductory physics
- **Grade Point Average** A minimum average of 3.00/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate study.
- **Tests Required** None. GRE General is optional.
- **Minimum English Competency Test Score**
 - **TOEFL iBT** 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21, **OR**,
 - **IELTS Academic** 6.5, with 6.0 in each of the four subscores, **OR**,
 - **PTE-Academic** 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.
- **Letters of Recommendation** Three required, preferably from instructors and advisors who are familiar with the applicant's recent work.
- **Personal Statement** A one- to three-page statement of the applicant's professional goals, including the justification for pursuing a career in neurosciences, is required.
- **Deadlines** Application deadlines for this program are listed on the Graduate College website.
- **Nondegree Applicants** Rarely accepted. Nondegree applicants must submit all credentials and meet the same admission requirements as degree applicants. The department only accepts nondegree applicants who have exceptional credentials and who desire to take a few specific courses for professional purposes. Nondegree students may not take practicum or individual study courses. Nondegree students will not be admitted to the degree program at a later time.

Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- Three areas of concentration are available for study. These concentrations are:
 - Neural Signal Transduction and Molecular Biology
 - Systems and Integrative Neuroscience
 - Human/Therapeutic Neuroscience and Methods of Neural Imaging
- **Minimum Semester Hours Required** Students must complete 96 hours of credit within 9 years from the baccalaureate. For those students entering the program with a valid Master of Science degree from an accredited institution, up to 32 hours of credit may be transferred if considered equivalent to core courses within the program.

- **Coursework** Required coursework for this program is also listed on the GPN website.

Code	Title	Hours
Required Courses		
All students must take or show proficiency in:		
NEUS 501 & NEUS 502	Foundations of Neuroscience I and Foundations of Neuroscience II	
NEUS/ANAT 403	Human Neuroanatomy	
NEUS 511	Experimental Foundations of Psychopharmacology	
GEMS 503	Cell Biology	
GEMS 504	Research Methods I (two modules per semester in second year of study)	
GEMS 505	Research Methods II	
NEUS 506	Research Rotations in Neuroscience (minimum of two in first year of study)	

Of the 96 total semester hours, 32 will be from formal coursework. Remaining courses will be selected depending upon the concentration chosen by the student. The remaining hours will be filled by research credit.

Registration and attendance for Journal Club (NEUS 595) is required each semester.

- **Examinations** A preliminary examination, both written and oral, is required.
- **Dissertation** Required.
- **Other Requirements** Each student must present at least one midthesis seminar prior to graduation. A final public seminar and oral defense of the dissertation are required.