PhD in Neuroscience

Degree Requirements

The Graduate School requires a minimum of 72 credit hours for completion of the Doctoral degree. The Interdisciplinary Neuroscience Program requires a certain number of these courses to be at the 8000 level or above (excluding research problems and thesis research).

Required Core Courses

- **BIO_SC 8440** Integrative Neuroscience I 3
- **BIO_SC 8442** Integrative Neuroscience II 3
- **BIO_SC 8050** Professional Survival Skills 2

Scientific Ethics (1 course, approved by thesis committee):
- **BIOCHM 8060** Ethical Conduct of Research
- **BIO_SC 8060** Ethical Conduct of Research
- **PSYCH 8910** Responsible Conduct of Research thru Engagement, Enactment and Empowerment NIH and other Federal Age
- **V_PBIO 8641** Introduction to Research Ethics
- **GRAD 9001** Topics in Graduate School

**Cellular/Molecular Courses:** select one

- **BIOL_EN 7070** Bioelectricity 3
- **MPP 7424** Medical Pharmacology 4
- **MPP 9426** Transmembrane Signaling 4
- **MPP 9432** Mammalian Membrane Physiology 1-3

**System/Behavior Courses:** select one

- **BIO_SC 7560** Sensory Physiology and Behavior 3
- **BIO_SC 7590** Computational Neuroscience 4
- **BIO_SC 7986** Neurology of Motor Systems 3
- **PSYCH 8210** Functional Neuroscience 3
- **PSYCH 9210** Psychopharmacology 3
- **V_BSCI 9467** Neural Cardiorespiratory Control 3
  or **MPP 9437** Neural Control of the Circulation 3

**Statistics course:** select one

- **STAT 7020** Statistical Methods in the Health Sciences 3
- **STAT 7070** Statistical Methods for Research 3
- **STAT 7410** Biostatistics and Clinical Trials 3
- **STAT 7540** Experimental Design 3
- **PSYCH 3010** Research Methods in Psychology I 3

Seminars

Neuroscience Seminar Course 2

**Neuroscience Journal Club:** examples include

- **BIO_SC 8187** Seminar in Areas of Specialization
- **NEUROSCI 8187** Neuroscience Journal Club
- **PTH_AS 8500** Seminar in Translational Neuroscience

Rotation and Thesis research

- **NEUROSCI 9090** Thesis Research in Neuroscience 1-6
  (repeatable up to 28 hours)
- **NEUROSCI 8090** Rotation Research in Neuroscience

Admission Criteria

**Fall deadline:** December 15

- **Minimum TOEFL scores:**
  - Internet-based test (IBT) 100
  - Paper-based test (PBT) 600

- **Minimum GRE scores:**
  - Prior to August 1, 2011: 1200
  - On or After August 1, 2011: 308

- **Bachelor's degree or its equivalent**

Neuroscience comprises a united field that integrates across many disciplines, and students from a variety of academic backgrounds are encouraged to apply to the Interdisciplinary Neuroscience Program (INP). U.S. residents and international applicants are strongly encouraged to apply.

**Required Application Materials**

*To the Graduate School:*

- All required Graduate School documents

*To the INP Program:*

- Departmental application
- 3 letters of recommendation
- GRE scores
- TOEFL (if applicable)