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
- **MPP 8415** 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 Cardiorespiratory Control

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

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**Admission Criteria**

Fall deadline: December 15

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

- Minimum GRE scores:

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- 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)