

# Decision Neuroscience PhD

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## COLLEGE OF LIBERAL ARTS

Learn more about the Doctor of Philosophy in Decision Neuroscience.

## About the Program

The field of decision neuroscience provides new insights into the mechanisms that underlie a wide range of economic and social phenomena, from risky choice and consumer behavior to altruism and cooperation. It is also a primary example of truly interdisciplinary research, with people from such diverse fields as business administration, economics, engineering, neuroscience, philosophy, physics and psychology working together to advance knowledge of mechanisms underlying decision-making and decision preferences.

The interdisciplinary PhD program in Decision Neuroscience in the Department of Psychology and Neuroscience in the College of Liberal Arts is a collaborative effort with the Fox School of Business and Management. Temple University's Department of Psychology and Neuroscience has long been a leader in brain and cognitive science research. Similarly, through the efforts of its Center for Applied Research in Decision Making, Fox School has been at the forefront of the field of decision neuroscience over the past ten years.

Students enrolled in the program gain a thorough understanding of the intellectual issues in the rapidly growing field of decision neuroscience and its subfields of neuroeconomics and neuromarketing. The program has the unique vision of integrating scientific findings with everyday real-world problems. It is designed for students who want to work at the intersection of neuroscience and business.

**Time Limit for Degree Completion:** 7 years

**Campus Location:** Main

**Full-Time/Part-Time Status:** Full-time study is required.

**Interdisciplinary Study:** The program is inherently interdisciplinary.

**Ranking:** Over the years, Temple University's Psychology PhD program has been consistently ranked among the very best by all evaluating agencies.

**Job Prospects:** Graduates of the program are prepared to seek tenure-track appointments either in business schools or psychology departments, depending on their approach to the program's curriculum.

**Non-Matriculated Student Policy:** Non-matriculated students are not permitted to take 8000-level Psychology courses.

**Financing Opportunities:** Both Teaching and Research Assistantships carry a stipend, full tuition remission (up to 12 credits per term depending on year and specialization), and health insurance benefits. The principal duties of a Teaching Assistant (TA) include assisting faculty members in classroom (field and observatory) instruction, conducting tutorials and discussion sections, and grading quizzes. A Research Assistant (RA) is expected to devote 20 hours per week on average to research obligations. An RA is assigned to a faculty member or principal investigator who is working on a specific research project. The appropriate subjects are determined by consultation between the student and the student's research and academic advisors.

## Admission Requirements and Deadlines

### Application Deadline:

*Fall:* December 1

Applications are not evaluated until after the deadline has passed.

*APPLY ONLINE to this graduate program.*

### Letters of Reference:

*Number Required:* 3

*From Whom:* Letters of recommendation should be obtained from college/university faculty members familiar with the applicant's academic competence.

**Master's Degree in Discipline/Related Discipline:** A master's degree is not required.

**Bachelor's Degree in Discipline/Related Discipline:** All applicants must present credentials that are the equivalent of the appropriate baccalaureate degree at Temple University.

**Statement of Goals:** In approximately 500 to 1,000 words, state your interest in Temple's program, your research goals, future career goals, and academic and research achievements.

**Standardized Test Scores:**

GRE: Optional. Scores may be submitted if available.

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 105
- IELTS Academic: 7.0
- PTE Academic: 72

**Resume:** Current resume required.

## Program Requirements

### General Program Requirements:

*Number of Credits Required Beyond the Baccalaureate: 42*

*Required Courses:*

Code	Title	Credit Hours
<b>Core Courses</b>		
BA 9813	Problem Solving using Quantitative Research Methods	3
MKTG 9090	Sem-Sel Topics in Mktg <sup>1</sup>	3
PSY 8310	Topical Seminar in Cognitive Psychology (2 courses) <sup>2</sup>	6
Course in decision neuroscience		3
Proseminar in decision neuroscience		3
<b>Methods Electives</b>		
Select two from the following:		6
BA 9806	Integrative Perspectives on Business Knowledge	
BA 9814	Advanced Quantitative Research Methods	
BA 9815	Problem Solving using Qualitative Research Methods	
PSY 8033	Hierarchical Linear Modeling	
<b>Other Electives</b>		
Select four from the following:		12
MKTG 9001	Behavioral Science Seminar	
MKTG 9002	Seminar on Behavioral Research in Marketing	
MKTG 9003	Sem-Quant Research-Mktg	
PSY 8310	Topical Seminar in Cognitive Psychology	
PSY 8312	Core Course in Cognitive Psychology	
PSY 8712	Core Course in Behavioral Neuroscience	
<b>Research Courses</b>		
PSY 9994	Preliminary Examination Preparation	1
PSY 9998	Pre-Dissertation Research	2
PSY 9999	Ph.D. Dissertation Research	3
<b>Total Credit Hours</b>		<b>42</b>

<sup>1</sup> The select topic for this course is an introduction to research in judgment and decision-making and their applications.

<sup>2</sup> PSY 8310 Topical Seminar in Cognitive Psychology is taken twice for credit. One course topic provides an introduction to the biological bases of higher brain function, including attention, consciousness, emotion, executive functions, language, memory and perception. The other provides an overview of the use of functional magnetic resonance imaging (fMRI) in the investigation of human sensory, motor and cognitive function.

### Additional Requirements:

*Research Rotations:*

In addition to undertaking specially designed interdisciplinary coursework, students complete research rotations during the first year of study that prepare them for independent research in the field of decision neuroscience. Students are required to complete two laboratory rotations in their first year (Fall and Spring) that would ideally be in different subfields with different mentors. Students also have the option to complete a third rotation during the Summer if they require additional exposure.

Research rotations are designed to give students a wide range of knowledge in the area of decision neuroscience by being engaged in the research of an assigned lab. When rotating through a lab (or with a research mentor), students are often paired with a senior lab member (e.g., a postdoctoral fellow or senior graduate student) to work on an ongoing research project. In some cases, they may be given a new project based on their knowledge and skill levels. Students are not, however, expected to complete a full project within an academic term.

*Research Meetings:*

Students are expected to attend research meetings and to be fully engaged in the research culture.

*Publications:*

It is expected that students will write, submit and publish articles.

*Grant Proposals:*

Students are expected to prepare a grant proposal for submission to a government funding agency. Eligible students are also required to write and submit a National Research Service Award (NRSA) proposal at the end of their third year. International students who are not eligible for federal grants are encouraged to work on submissions with faculty members.

**Culminating Events:**

*Comprehensive Examination:*

The comprehensive examination is taken at the end of the second year of study. Each student must propose and defend a major area paper in their proposed field of research. Upon passing the exam, students choose a faculty member from either the College of Liberal Arts or Fox School as their primary mentor.

*Dissertation:*

The doctoral dissertation is an original empirical study that makes a significant contribution to the field. It should expand the existing knowledge and demonstrate the student's grasp of research methods and a mastery of their primary area of interest. Dissertations should be rigorously investigated; uphold the ethics and standards of the field; demonstrate an understanding of the relationship between the primary area of interest and the broader field of psychology; and be prepared for publication in a professional journal.

The Dissertation Examining Committee evaluates the student's dissertation and oral defense, including the student's ability to express verbally their research question, methodological approach, primary findings and implications. The Dissertation Examining Committee consists of the Doctoral Advisory Committee plus at least three additional doctorally prepared individuals. The majority of the individuals on the Committee must be members of the Temple University Graduate Faculty. The Dissertation Examining Committee votes to pass or fail the dissertation and the defense at the conclusion of the public presentation.

If a student needs to change a member of either the Doctoral Advisory Committee or Dissertation Examining Committee, the new member must be approved by the Departmental Chair and registered with the department's Graduate Secretary and the Graduate School.

Students who are preparing to defend their dissertation should confirm a time and date with their Dissertation Examining Committee and register with the Graduate Secretary at least 15 days before the defense is to be scheduled. The Graduate Secretary arranges the time, date and room within two working days, and forwards to the student the appropriate forms.

After the Graduate Secretary has scheduled the defense, the student must send to the Graduate School a completed "Announcement of Dissertation Defense" form, found in TUportal under the Tools tab within "University Forms," at least 10 working days before the defense. The Department posts announcements of the defense, and the Graduate School lists the defense on its website.

## Contacts

### Department Web Address:

<https://www.temple.edu/academics/degree-programs/decision-neuroscience-phd-la-dns-phd>

### Department Information:

Dept. of Psychology and Neuroscience  
659 Weiss Hall  
1701 N. 13th Street  
Philadelphia, PA 19122-6085  
215-204-7321

### Submission Address for Application Materials:

<https://apply.temple.edu/CLA/>

### Department Contacts:

Dr. Jason Chein  
Professor, Psychology and Neuroscience

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215-204-7321

*Chairperson:*  
Dr. Peter Marshall  
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