# **Decision Neuroscience PhD**

FOX SCHOOL OF BUSINESS AND MANAGEMENT

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

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.

Affiliation(s): Research interests of Fox faculty are supported by numerous centers and institutes throughout the Fox School and Temple University.

**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 doctoral courses.

**Financing Opportunities:** Typically, all PhD students receive financial assistantship in the form of full tuition remission and a stipend in return for offering services as a Research Assistant (RA) or Teaching Assistant (TA). Level of support is based on the concentration, the applicant's qualifications and competitive considerations. Students can also receive remuneration for conference travel, publications and academic achievement.

# **Admission Requirements and Deadlines**

## **Application Deadline:**

Fall:

Applications must be submitted AND complete (i.e., all required materials must be received and verified by Fox Staff) by Dec. 5 to be considered. Applications received after this deadline are reviewed on a case-by-case basis and dependent on availability.

APPLY ONLINE to this Fox graduate program.

## Letters of Reference:

Number Required: 2

From Whom: Letters of recommendation should be obtained from evaluators, typically college/university faculty or an immediate work supervisor, who can provide insight into your abilities and talents, as well as comment on your aptitude for graduate study.

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

**Bachelor's Degree in Discipline/Related Discipline:** The equivalent of a four-year U.S. baccalaureate degree from an accredited university or college is required. FFor three-year degrees, an evaluation of mark sheets may be required by WES or another NACES organization.

Statement of Goals: Essay prompts can be found in the online application portal for Business Administration PhD applicants.

Standardized Test Scores:

GMAT/GRE: Required. GMAT scores are preferred. Test results cannot be more than five years old. Although the applicant's test score is an important factor in the admissions process, other factors, such as the ability to conduct research as demonstrated by academic research publications and whether your indicated research interests match with those of our faculty, are also taken into consideration.

Applicants who earned their baccalaureate degree from an institution outside of the United States must report scores for standardized test of English that meet the minimums below. Exceptions are made for applicants who have subsequently earned a baccalaureate or masters degree from the approved list of countries provided bout the Graduate School.

TOEFL iBT: 90IELTS Academic: 7.0Duolingo: 110PTE Academic: 68

Resume: Current resume or CV required.

## **Program Requirements**

## **General Program Requirements:**

Number of Credits Required Beyond the Baccalaureate: 42

## Required Courses:

Code	Title	Credit Hours
Core Courses		
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 neuroscie	ence	3
Proseminar in decision neuroscience		3
Methods Electives		
Select two from the following	g:	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	
Other Electives		
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	
Research Courses		
BA 9994	Preliminary Examination Preparation	1
BA 9998	Pre-Dissertation Research	2
BA 9999	Dissertation Research	3
Total Credit Hours		42

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

## **Additional Requirements:**

Research Rotations:

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.

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 Fox School or the College of Liberal Arts 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 knowledge 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 business; and be prepared for publication in an academic journal.

The Doctoral Advisory Committee is formed to oversee the student's doctoral research and is comprised of at least three Graduate Faculty members. Two members, including the Chair, must be from the student's department. The Chair is responsible for overseeing and guiding the student's progress, coordinating the responses of the committee members, and informing the student of their academic progress.

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 votes to pass or fail the dissertation and the defense at the conclusion of the public presentation. This committee is comprised of the Doctoral Advisory Committee and at least one additional faculty member from outside the department.

If any member decides to withdraw from the committee, the student shall notify the Chair of the Dissertation Examining Committee and the PhD Program Director. The student, in consultation with the Chair, is responsible for finding a replacement. Inability to find a replacement shall constitute evidence that the student is unable to complete the dissertation. In such a case, the student may petition the PhD Program Director for a review. Once review of the facts and circumstances is completed, the Director rules on the student's progress. If the Director rules that the student is not capable of completing the dissertation, the student is dismissed from the program. This decision may be appealed to the Senior Associate Dean. If dismissed, the student may appeal to 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 days before the defense. The department posts flyers announcing the defense, and the Graduate School announces the defense on its website.

## Contacts

## **Program Web Address:**

https://www.temple.edu/academics/degree-programs/decision-neuroscience-phd-bu-dns-phd

## **Department Information:**

Fox School of Business and Management 1801 Liacouras Walk Alter Hall, Suite 701 Philadelphia, PA 19122 foxinfo@temple.edu 215-204-5890 Fax: 215-204-1632

# **Submission Address for Application Materials:**

https://connect.temple.edu/portal/gr\_applytoday

# **Department Contacts:**

Admissions:

Fox PhD Admissions foxphdo@temple.edu

Program Director: Vinod Venkatraman, PhD Associate Professor, Marketing vinod.venkatraman@temple.edu