

Undergraduate Major in COGNITIVE SCIENCE (Catalog Year 2023-24)

General Requirements

- ___ Requires 40 credits, at most 21 in any one department.
- ___ The CLAS requirements for a BA or BS degree apply.
- ___ At most 6 transfer credits may be applied to the plan.
- ___ All courses on plan require a grade of C- (1.7) or higher.

1. Core Courses (16 credits)

- ___ COGS 2201 Foundations of Cognitive Science
- ___ COGS 3584 Seminar in Cognitive Science (1 credit)

Four of the following:

- ___ ANTH 3250 Cognitive Anthropology
- ___ CSE 4705 Artificial Intelligence
- ___ LING 2010Q The Science of Linguistics
- ___ PHIL 3250/W Philosophy of Mind
- ___ PSYC 2501 Cognitive Psychology
- ___ SLHS 4245/W Neurosci. Cog. & Comm. Disorders

2. Research (6 credits)

Statistics (one of the following, for at least 3 credits):

- ___ PSYC 2100WQ Principles of Research in Psych.
- ___ STAT 2215Q Introduction to Statistics II
- ___ STAT 3025Q Statistical Methods (Calculus level)

Methods (one of the following, for at least 3 credits):

- ___ ANTH 3003 Field Res. in Soc. Set. (if elected for 3 credits)
- ___ ANTH 3004 Cultural Research (if elected for 3 credits)
- ___ ANTH 3090 Dir Field Res in Anth (if elected for 3 credits)
- ___ LING 3110 Experimental Linguistics
- ___ PSYC 3250W Lab in Animal Behavior & Learning
- ___ PSYC 3251 Lab in Physiological Psychology
- ___ PSYC 3253 Sensory Neuroscience Lab
- ___ PSYC 3450W Lab in Developmental Psychology
- ___ PSYC 3552 Lab in Sensation and Perception

3. Formal Systems Courses (3 credits)

At least 3 credits are required, unless the '†' option is used.

- ___ COGS 2500Q Coding for Cognitive Science
- ___ CSE 2500 Introduction to Discrete Systems
- ___ CSE 3500 Algorithms and Complexity †
- ___ CSE 3502 Theory of Computation †
- ___ CSE 3802 Numerical Methods
- ___ LING 3000Q Intro to Computational Linguistics †
- ___ LING 3310Q Phonology †
- ___ LING 3410Q Semantics †
- ___ LING 3511Q Syntax †
- ___ Math 2210Q Applied Linear Algebra
- ___ Math 2410Q Elementary Differential Equations
- ___ Math 3160 Probability
- ___ Math 3210 Abstract Linear Algebra
- ___ Math 3230 Abstract Algebra
- ___ PHIL 2211Q Symbolic Logic
- ___ PHIL 3214 Symbolic Logic II

4. Advanced Courses* (12 credits)

Must include courses from at least 3 different departments. Can include core courses not used to satisfy the Core Courses (§1) requirement.

- ___ ANTH 3200 Human Behavioral Ecology
- ___ ANTH 3405 Religion and Mind
- ___ COGS 2345 Language and Racism
- ___ CSE 3500 Algorithms and Complexity †
- ___ CSE 3502 Theory of Computation †
- ___ LING 3000Q Intro to Computational Linguistics †
- ___ LING 3310Q Phonology †
- ___ LING 3410Q Semantics †
- ___ LING 3511Q Syntax †
- ___ LING 3610W Language and Culture
- ___ PHIL 2208/W Epistemology
- ___ PHIL 2210/W Metaphysics
- ___ PHIL 2212/W Philosophy of Science
- ___ PHIL 3241 Language: Meaning and Truth
- ___ PNB 3251 Biology of the Brain
- ___ PSYC 2200 Physiological Psychology
- ___ PSYC 2208 Sensory Systems Neuroscience
- ___ PSYC 2209 Learning & Memory: Brain to Behavior
- ___ PSYC 2400 Developmental
- ___ PSYC 2500 Learning
- ___ PSYC 3270 Cur. Topics in Behavioral Neuroscience
- ___ PSYC 3440 Developmental Cognitive Neuroscience
- ___ PSYC 3500 Psychology of Language
- ___ PSYC 3501 Sensation and Perception
- ___ SLHS 2203 Anatomy/Physiology of Speech & Hearing
- ___ SLHS 2204 Speech and Language Acquisition
- ___ SLHS 4123 Bilingualism in Typ. & Atyp. Populations
- ___ SLHS 4254/W Intro. to Lang. Disorders in Children
- ___ SLHS 4376 Language Impairments & Literacy

* PSYC 3470 is a variable topics course and can be used as an Advanced Course with approval of advisor.

† Option: Any of the following can be counted towards the 12 credits in Advanced Courses (§4) and simultaneously "check off" the Formal Systems requirement (§3): CSE 3500, 3502; LING 3000Q, 3310Q, 3410Q, 3511Q. Students using this option must take 6 credits in §5. Others need 3 credits in §3 and 3 credits in §5.

5. Electives (3-6 credits)

One additional course (two, if the '†' option is used) from the above lists, COGS 3589, COGS 3599, ANTH 4596W, or other related courses from any department, chosen with advisor approval.

1. _____
2. _____

The writing-in-the-major requirement is fulfilled by taking any of the W courses listed on this plan.

- NOTES:**
1. Commonly needed prerequisites: PSYC 1100 and 1101/3, for all PSYC courses in the major; STAT 1000Q or 1100Q, for all options in §2-Statistics; and at least one of PHIL 1101-1107, for most PHIL courses in the major.
 2. COGS 2201 is a spring-only course, and is best taken in Year 2; COGS 3584 is offered both semesters, and is best taken in Year 3 or 4.
 3. Electives (§5) are similar to "Relateds," but this major does not require the usual 12 credits of "Related Courses".
 4. Double major with Psychological Sciences is strongly discouraged, due to excessive overlap.