

## Undergraduate Major in COGNITIVE SCIENCE (Catalog Year 2025-26)

### General Requirements

- \_\_\_ Requires 40 credit. No more than 21 credits can come from a single 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.
- \_\_\_ Graduate courses (5000+) need instructor permission

### 1. Core Courses (16 credits)

- \_\_\_ COGS 2201 Foundations of Cognitive Science
- \_\_\_ COGS 3584 Seminar in Cognitive Science (1 credit) (F&S)

Four of the following:

- \_\_\_ ANTH 3250/ANTH 5332 Cognitive Anthropology
- \_\_\_ COGS 2500Q Coding for Cognitive Sciences (F)
- \_\_\_ CSE 4705 Artificial Intelligence
- \_\_\_ LING 2010Q The Science of Linguistics (F&S)
- \_\_\_ 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 2100Q/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) or ANTH 5321 Ethnographic Methods
- \_\_\_ ANTH 3004 Cultural Research (if elected for 3 credits)
- \_\_\_ ANTH 3090 Dir Field Res in Anth (if elected for 3 credits)
- \_\_\_ LING 3110/6110 Experimental Linguistics (F)
- \_\_\_ PSYC 2100Q/WQ Principles of Research in Psychology
- \_\_\_ PSYC 3250W Lab in Animal Behavior & Learning
- \_\_\_ PSYC 3251/W Lab in Physiological Psychology
- \_\_\_ PSYC 3253 Sensory Neuroscience Lab
- \_\_\_ PSYC 3450W Lab in Developmental Psychology
- \_\_\_ PSYC 3551W Lab in Sensation and Perception
- \_\_\_ PSYC 3552 Lab in Sensation and Perception

### 3. Formal Systems Courses (3 credits)

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

- \_\_\_ CSE 2500 Introduction to Discrete Systems
- \_\_\_ CSE 3500 Algorithms and Complexity †
- \_\_\_ CSE 3502 Theory of Computation †
- \_\_\_ CSE 3802 Numerical Methods
- \_\_\_ LING 3000Q/5000 Intro to Computational Linguistics † (S)
- \_\_\_ LING 3310Q/5310 Phonology † (F)
- \_\_\_ LING 3410Q/5410 Semantics † (S)
- \_\_\_ LING 3511Q Syntax † (F) or LING 5500 Advance Introduction to 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
- \_\_\_ PSYC 3503/5570 Intro. to Programming Complex Systems (S)

### 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/ANTH 5306 Human Behavioral Ecology
- \_\_\_ ANTH 3405 Religion and Mind or ANTH 5331 Cognitive Science of Religion
- \_\_\_ COGS 2345 Language and Racism
- \_\_\_ COMM 4650 Human-Computer Interactions
- \_\_\_ CSE 3500 Algorithms and Complexity †
- \_\_\_ CSE 3502 Theory of Computation †
- \_\_\_ LING 3000Q Intro to Computational Linguistics † (F)
- \_\_\_ LING 3310Q/5310 Phonology † (F)
- \_\_\_ LING 3410Q/5410 Semantics † (F)
- \_\_\_ LING 3511Q/5510 Syntax † (F) or LING 5500 Advance Introduction to Syntax
- \_\_\_ LING 3610W Language and Culture (F&S)
- \_\_\_ PHIL 2208/W Epistemology
- \_\_\_ PHIL 2210/W Metaphysics
- \_\_\_ PHIL 2212/W Philosophy of Science
- \_\_\_ PHIL 3241 Language: Meaning and Truth
- \_\_\_ PHIL 3247/W Philosophy of Psychology
- \_\_\_ 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 3100/W The History and Systems of Psychology
- \_\_\_ PSYC 3270 Cur. Topics in Behavioral Neuroscience
- \_\_\_ PSYC 3440 Developmental Cognitive Neuroscience or COGS 5130/PSYC 5150 Neurodev. & Plast.
- \_\_\_ PSYC 3500 Psychology of Language or COGS 5120 Struct., Acquis., & Process. of Lang
- \_\_\_ PSYC 3501 Sensation and Perception
- \_\_\_ PSYC 3501 Music, Perception, and Cognition
- \_\_\_ PSYC 3503/5570 Intro. to Programming Complex Systems (S)
- \_\_\_ PSYC 3270 Current Topics in Behavioral Neuroscience or COGS 5150/PSYC 5424 Cognitive Neuroscience of Language Across the Lifespan
- \_\_\_ SLHS 2203 Anatomy/Physiology of Speech & Hearing (F&S)
- \_\_\_ SLHS 2204 Speech and Language Acquisition (F&S)
- \_\_\_ SLHS 4123/5123 Bil. Lang. & Cogn. in Typ. & Atyp. Pop.
- \_\_\_ SLHS 4254/W Intro. to Lang. Disorders in Children (F&S) or COGS 5140/PSYC 5445 Neurobio. of Lang.: Typ. & Atyp. Cogn. & Lang. Dev.

\* 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)**

You need to take one more class (or two if you choose a course marked with †) from the list above (Core Courses, Research Courses, Formal Systems, or Advanced Courses).

You can also take **COGS 3589**, **COGS 3599**, **ANTH 4596W**, or a similar course from any department, but you must check with your **advisor** first to make sure it counts.

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.
- F = Normally offered during Fall semester  
S = Normally offered during Spring semester