

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 (S)
- ___ 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 (F&S)
- ___ SLHS 4245/W Neurosci. Cog. & Comm. Disorders (F&S)

2. Research (6 credits)

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

- ___ PSYC 2100Q/PSYC 2100WQ Prin. of Res. in Psych. (F&S)
- ___ 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 Experimental Linguistics (F) or LING 6110 Methods in Acquisition
- ___ PSYC 3250W Lab in Animal Behavior & Learning
- ___ PSYC 3251/W Lab in Physiological Psychology (F&S)
- ___ PSYC 3253 Sensory Neuroscience Lab (F&S)
- ___ PSYC 3450W Lab in Developmental Psychology (S)
- ___ PSYC 3551 Lab Cognition
- ___ PSYC 3552 Lab in Sensation and Perception (F)

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 Computer Modeling of Cognitive Processes or PSYC 5570 Current Topics in Cognitive Science (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
- ___ COGS 2345 Language and Racism
- ___ COMM 4650 Human-Computer Interactions
- ___ CSE 3500 Algorithms and Complexity †
- ___ CSE 3502 Theory of Computation †
- ___ LING 3000Q/5000 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 Epistemology
- ___ PHIL 2210/2210W Metaphysics
- ___ PHIL 2212/2212W 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 (F&S)
- ___ PSYC 2208 Sensory Systems Neuroscience (F&S)
- ___ PSYC 2209 Learning & Memory: Brain to Behavior (F&S)
- ___ PSYC 2400 Developmental (F&S)
- ___ PSYC 2500 Learning (F&S)
- ___ PSYC 3100/W The Hist. and Systems of Psychology (F&S)
- ___ PSYC 3270 Current Topics in Behavioral Neuroscience (S*) or COGS 5150/PSYC 5424 Cog. Neuroscience of Language Across the Lifespan
- ___ PSYC 3440 Developmental Cognitive Neuroscience or COGS 5130/PSYC 5150 Neurodevelopment & Plasticity
- ___ PSYC 3470 Current Topics in Developmental Psychology*
- ___ PSYC 3500 Psychology of Language (F&S) or COGS 5120 Struct., Acquis., & Process. of Lang
- ___ PSYC 3501 Sensation and Perception (S)
- ___ PSYC 3502 Psychology of Consciousness
- ___ PSYC 3503 Computer Modeling of Cognitive Processes or PSYC 5570 Current Topics in Cognitive Science (S)
- ___ PSYC 3504 Music, Perception, and Cognition (S)
- ___ SLHS 2203 Anatomy/Physiology of Speech & Hearing (F&S)
- ___ SLHS 2204 Speech and Language Acquisition (F&S)
- ___ SLHS 4123 Bilingualism Lang. & Cogn. in Typ. & Atyp. Pop. (F*)
- ___ 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 (Note: Availability may vary by instructor, so double-check each semester.)
S = Normally offered during Spring semester (Note: Availability may vary by instructor, so double-check each semester.)
S* = Lastly offered during Spring semester; however, this may change depending on enrollment—at least 8 students are required to open the course.
F* = Lastly offered during Fall semester; however, this may change depending on enrollment—at least 8 students are required to open the course.