

Cognitive Neuroscience Track

The Individualized Major must consist of at least 36 credits. The courses listed below are recommended for students who are interested in cognitive neuroscience. To learn more about a course, click on the name to bring up the department's course description and pre-requisites required (if any).

1. 01:185:201: [Cognitive Science: A Multi-disciplinary Introduction, recitation included \(4\)](#) **and/or** 01:185:301: [Cognition and Decision Making, recitation included \(4\)](#), **and/or** 01:185:310: [The Concept of Concepts in Cognitive Science \(3\)](#), **and/or** 01:185:320: [Research Methods in Cognitive Science \(3\)](#), **and/or** 01:185:410: [Language and Cognition \(3\)](#), **and/or** 01:185:411: [Advanced Topics in Cognitive Science, recitation included \(4\)](#).
2. 01:185:495: [Research in Cognitive Science](#) (minimum 3 credits). Students may also fulfill this requirement via Departmental Honors or College Honors courses.
3. **Two** or more of the following courses:
 - 01:146:245: [Fundamentals of Neurobiology \(3\)](#)
 - 01:146:295: [Essentials of Cell Bio and Neuro \(3\)](#)
 - 01:146:445: [Advanced Neurobiology I \(4\)](#)
 - 01:146:447: [Advanced Neurobiology II \(3\)](#)
 - 01:447:380: [Genetics \(4\)](#)
 - 01:447:484: [Behavioral and Neural Genetics \(3\)](#)
 - 01:119:195: [Brain, Mind and Behavior \(3\)](#)
4. **One** or more of the following courses:
 - 01:730:329: [Minds, Machines and Persons \(3\)](#)
 - 01:730:360: [Philosophical Aspects of Cognitive Science \(3\)](#)
 - 01:730:418: [Philosophy of Mind \(3\)](#)
5. **Two** or more of the following courses:
 - 01:830:305: [Cognition \(3\)](#)
 - 01:830:313: [Physiological Psychology \(3\)](#)
 - 01:830:361: [Developmental Psychobiology \(3\)](#)
 - 01:830:410: [Advanced Topics in Psychobiology \(3\)](#)
 - 01:830:411: [Advanced Topics in Psychobiology, WI \(3\)](#)
 - 01:830:412: [Neuropsychopharmacology \(3\)](#)
 - 01:830:463: [Behavioral Pharmacology \(3\)](#)
6. **One** or more of the following courses:
 - 01:198:107: [Computing for Math and Sciences \(3\)](#)
 - 01:198:111: [Introduction to Computer Science \(4\)](#)
 - 01:198:440: [Introduction to Artificial Intelligence \(4\)](#)
 - 01:640:338: [Discrete and Probabilistic Models in Biology \(3\)](#)
 - 14:125:405: [Introduction to Neural Processes \(3\)](#)

Generalist Track

The Individualized Major must consist of at least 36 credits. The courses listed below are recommended for students who are interested in an overview of cognitive science. To learn more about a course, click on the name to bring up the department's course description and pre-requisites required (if any).

1. 01:185:201: [Cognitive Science: A Multi-disciplinary Introduction, recitation included \(4\)](#) **and/or** 01:185:301: [Cognition and Decision Making, recitation included \(4\)](#), **and/or** 01:185:310: [The Concept of Concepts in Cognitive Science \(3\)](#), **and/or** 01:185:320: [Research Methods in Cognitive Science \(3\)](#), **and/or** 01:185:410: [Language and Cognition \(3\)](#), **and/or** 01:185:411: [Advanced Topics in Cognitive Science, recitation included \(4\)](#).
2. 01:185:495: [Research in Cognitive Science](#) (minimum 3 credits). Students may also fulfill this requirement via Departmental Honors or College Honors courses.
3. **One** or more of the following courses:
 - 01:198:107: [Computing for Math and Sciences \(3\)](#)
 - 01:198:111: [Introduction to Computer Science \(4\)](#)
 - 01:198:112: [Data structures \(4\)](#)
 - 01:198:205: [Introduction to Discrete Structures I \(4\)](#)
 - 01:198:440: [Introduction to Artificial Intelligence \(4\)](#)
4. **One** or more of the following courses:
 - 01:615:201: [Introduction to Linguistic Theory \(3\)](#)
 - 01:615:305: [Syntax \(3\)](#)
 - 01:615:315: [Phonology \(3\)](#)
 - 01:615:325: [Semantics \(3\)](#)
 - 01:615:441: [Linguistics and Cognitive Science \(3\)](#)
5. **One** or more of the following courses:
 - 01:730:201: [Introduction to Logic \(3\)](#)
 - 01:730:328: [Philosophy of Psychology \(3\)](#)
 - 01:730:329: [Minds, Machines and Persons \(3\)](#)
 - 01:730:360: [Philosophical Aspects of Cognitive Science \(3\)](#)
6. **One** or more of the following courses:
 - 01:830:301: [Sensation and Perception \(3\)](#)
 - 01:830:305: [Cognition \(3\)](#)
 - 01:830:351: [Psychology of Language \(3\)](#)
 - 01:830:484: [Language Acquisition \(3\)](#)

Language Track

The Individualized Major must consist of at least 36 credits. The courses listed below are recommended for students who are interested in the cognitive science of language. To learn more about a course, click on the name to bring up the department's course description and pre-requisites required (if any).

1. 01:185:201: [Cognitive Science: A Multi-disciplinary Introduction, recitation included \(4\)](#) **and/or** 01:185:301: [Cognition and Decision Making, recitation included \(4\)](#), **and/or** 01:185:310: [The Concept of Concepts in Cognitive Science \(3\)](#), **and/or** 01:185:320: [Research Methods in Cognitive Science \(3\)](#), **and/or** 01:185:410: [Language and Cognition \(3\)](#), **and/or** 01:185:411: [Advanced Topics in Cognitive Science, recitation included \(4\)](#).
2. 01:185:495: [Research in Cognitive Science](#) (minimum 3 credits). Students may also fulfill this requirement via Departmental Honors or College Honors courses.
3. 01:615:201: [Introduction to Linguistic Theory \(3\)](#)
4. 01:830:351: [Psychology of Language \(3\)](#)
5. 01:830:352: [Psychology of Language Lab \(1\)](#)
6. 01:830:353: [Language Acquisition \(3\)](#) OR
01:830:484: [Language Acquisition \(3\)](#)
7. **One** of the following courses:
01:730:210: [Philosophy of Language \(3\)](#)
01:730:420: [Philosophy of Language \(3\)](#)
8. **Two** or more of the following upper-level linguistics courses:
01:615:305: [Syntax \(3\)](#)
01:615:315: [Phonology \(3\)](#)
01:615:325: [Semantics \(3\)](#)
01:615:411: [Morphology \(3\)](#)
01:615:441: [Linguistics and Cognitive Science \(3\)](#)
01:615:445: [Language and Cognition \(3\)](#)
9. **One** or more of the following courses in logic:
01:730:201: [Introduction to Logic \(3\)](#)
01:730:315: [Applied Symbolic Logic \(3\)](#)
01:730:407: [Intermediate Logic I \(3\)](#)
01:730:408: [Intermediate Logic II \(3\)](#)
01:640:461: [Mathematical Logic \(3\)](#)
10. **One** or more of the following courses:
01:198:107: [Computing for Math and Sciences \(3\)](#)
01:198:111: [Introduction to Computer Science \(4\)](#)
01:198:112: [Data structures \(4\)](#)
01:198:314: [Principles of Programming Languages \(4\)](#)
01:198:344: [Design and Analysis of Computer Algorithms \(4\)](#)
01:198:415: [Compilers \(4\)](#)
01:198:440: [Introduction to Artificial Intelligence \(4\)](#)
01:198:452: [Formal Languages and Automata \(3\)](#)

Vision Track

The Individualized Major must consist of at least 36 credits. The courses listed below are recommended for students who are interested in the cognitive science of vision. To learn more about a course, click on the name to bring up the department's course description and pre-requisites required (if any).

1. 01:185:201: [Cognitive Science: A Multi-disciplinary Introduction, recitation included \(4\)](#) **and/or** 01:185:301: [Cognition and Decision Making, recitation included \(4\)](#), **and/or** 01:185:310: [The Concept of Concepts in Cognitive Science \(3\)](#), **and/or** 01:185:320: [Research Methods in Cognitive Science \(3\)](#), **and/or** 01:185:410: [Language and Cognition \(3\)](#), **and/or** 01:185:411: [Advanced Topics in Cognitive Science, recitation included \(4\)](#).
2. 01:185:495: [Research in Cognitive Science](#) (minimum 3 credits). Students may also fulfill this requirement via Departmental Honors or College Honors courses.
3. 01:830:301: [Sensation and Perception \(3\)](#)
4. 01:830:302: [Sensation and Perception Lab \(1\)](#)
5. **One** or more of the following courses:
 - 01:198:107: [Computing for Math and Sciences \(3\)](#)
 - 01:198:111: [Introduction to Computer Science \(4\)](#)
 - 01:198:112: [Data structures \(4\)](#)
 - 01:198:344: [Design and Analysis of Computer Algorithms \(4\)](#)
 - 01:198:428: [Introduction to Computer Graphics \(4\)](#)
 - 01:198:440: [Introduction to Artificial Intelligence \(4\)](#)
 - 14:125:405: [Introduction to Neural Processes \(3\)](#)
6. **One** or more of the following courses:
 - 01:640:300: [Introduction to Mathematical Reasoning \(3\)](#)
 - 01:640:338: [Discrete and Probabilistic Models in Biology \(3\)](#)
 - 01:640:428: [Graph Theory \(3\)](#)
 - 01:640:461: [Mathematical Logic \(3\)](#)
 - 01:640:477: [Mathematical Theory of Probability \(3\)](#)
 - 01:640:478: [Probability 2 \(3\)](#)
 - 01:640:481: [Mathematical Theory of Statistics \(3\)](#)
 - 01:960:379: [Basic Probability Theory \(3\)](#)
 - 01:960:381: [Theory of Probability \(3\)](#)
 - 01:960:382: [Theory of Statistics \(3\)](#)
7. **One** or more of the following courses:
 - 01:730:328: [Philosophy of Psychology \(3\)](#)
 - 01:730:329: [Minds, Machines and Persons \(3\)](#)
 - 01:730:360: [Philosophical Aspects of Cognitive Science \(3\)](#)
 - 01:730:418: [Philosophy of Mind \(3\)](#)
8. **One** or more of the following courses:
 - 01:830:305: [Cognition \(3\)](#)
 - 01:830:307: [Perception in Cognitive Science \(3\)](#)
 - 01:830:313: [Physiological Psychology \(3\)](#)
 - 01:830:480: [Topics in Visual Perception \(3\)](#)
 - 01:146:245: [Fundamentals of Neurobiology \(3\)](#)
 - 01:146:295: [Essentials of Cell Bio and Neuro \(3\)](#)