

COGNITIVE SCIENCE MAJOR: COGNITIVE NEUROSCIENCE TRACK

1. Foundation Requirement in Cognitive Science (185:201; 4cr)
2. Logical and Statistical Reasoning (One Course from Each Column)

Computational/Logical Reasoning	Statistical Reasoning
<ul style="list-style-type: none"> • Introduction to Logic (730:201; 3cr) • Introduction to Logic (730:202; 4cr) • Computing for Math and the Sciences (198:107; 3cr) • Introduction to Discrete Structures I (198:205; 4cr) • Mathematical Logic (640:461; 3cr) • Introduction to Mathematical Reasoning (640:300; 3cr) 	<ul style="list-style-type: none"> • Methods in Cognitive Science (185:320; 3cr) • Discrete Structures II (198: 206; 4cr) • Calculus I (640:135; 4cr) or Honors (640:191; 4cr) • Calculus II (640:136; 4cr) or Honors (640:192; 4cr) • Calculus I for Mathematical and Physical (640:151; 4cr) • Calculus I for Mathematical and Physical (640:152; 4cr) • Quantitative Methods in Psychology (830:200; 4cr) • Advanced Statistical Methods in Psychology (830:400;3cr) • Statistics I (960:211; 3cr) • Introductory Statistics for Business (960:285; 3cr) • Basic Statistics for Economics (960:201; 4cr) • Basic Statistics for Research (960:401; 3cr)

3. Distributional requirements (One Course from Three Columns)

Cognitive Neuroscience	Decision Making	Language	Minds, Machines, & Computation	Perception
<ul style="list-style-type: none"> • Brain, Mind and Behavior (119:195; 3cr) • Fundamentals of Neurobiology (146:245; 3cr; for CBN majors) • Essentials of Cell Biology & Neuroscience (146:295; 3cr) • Data Structures (198:112, 4cr) • Physiological Psychology (830:313; 3cr) 	<ul style="list-style-type: none"> • Cognition and Decision Making (185:301; 4cr) • Intermediate Microeconomics Analysis (220:320; 3cr) 	<ul style="list-style-type: none"> • Meaning and Numbering (185:330; 3cr) • Language and Cognition (185: 410; 4cr) • Introduction to Linguistic Theory (615:201; 3cr) • Philosophy of Language (730:210; 3cr) • Psychology of Language (830:351; 3cr) 	<ul style="list-style-type: none"> • The Concept of 'Concepts' in Cognitive Science (185: 310; 3cr) • Introduction to Computer Science (198:111; 4cr) or • Introduction to Artificial Intelligence (198: 440, 4cr) • Minds, Machines and Persons (730:329; 3cr) • Philosophical Aspects of Cognitive Science (730:360; 3cr) 	<ul style="list-style-type: none"> • Design and Analysis of Computer Algorithms (198:344; 4cr) • Sensation & Perception (830:301; 3cr)

4. Capstone Course (One Course from the Following)

Advanced Topics in Cognitive Science (185:411;4cr)	Research in Cognitive Science (185:395;3cr)	Honors Research (185:495;3cr)
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5. Electives (Three Courses from the Following)	6. Additional Requirements
<ul style="list-style-type: none"> • Behavioral and Neural Genetics (146:384; 3cr) • Advanced Neurobiology I (146:445; 3cr) • Advanced Neurobiology II (146:447; 3cr) • Research Methods in Cognitive Science (185:320; 3cr) • Cognitive Neuroscience Through Case Studies (185:430; 4cr) • Modeling and Simulation of Continuous Systems (198: 424; 4cr) • Introduction to Artificial Intelligence (198:440; 4cr) • Mathematical Models in the Social and Biological Sciences (640:338; 3cr) • Minds, Machines and Persons (730:329; 3cr) • Philosophical Aspects of Cognitive Science (730:360; 3cr) • Philosophy of Mind (730:418; 3cr) • Cognition (830:305; 3cr) • Neuropsychology (830:310; 3cr) • Advanced Topics in Psychobiology (830:410 or 411; 3cr) • Neuropsychopharmacology (830:412; 3cr) • Behavioral Pharmacology (830:463; 3cr) • Introduction to Neural Processes - Biological and Artificial (14:125:440; 3cr) 	<ul style="list-style-type: none"> • Minimum of 36 credits • Four Cognitive Science Courses • Grades of C or better must be earned in all courses counted towards the major. • Two thirds of total credits must be from School of Arts and Sciences • Two thirds of total credits must be 300 level+ • No more than 4 courses from Philosophy or Computer Science • No more than 3 courses from any other department • Note: Courses used to satisfy the Distribution requirement cannot also be used to satisfy the Track elective requirements <p>Students may declare the major using my Major after taking Intro to Cog Sci (185:201), one Computational/Logical course, and one Statistical Reasoning course.</p>



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