

COGNITIVE SCIENCE

cogsci.northwestern.edu

Cognitive science is the scientific study of the mind with the goal of understanding the nature of thought. Students learn the ways in which converging sources of evidence may be integrated to discover the mechanisms underlying the complex adaptive properties of human cognition. The major in cognitive science gives a broad foundation in this interdisciplinary field, encompassing cognitive psychology, linguistics, artificial intelligence, neuroscience, and related disciplines. Required introductory courses survey basic phenomena and approaches; basic methodology courses impart the methods of cognitive science; core courses provide foundations of disciplines within cognitive science; and elective courses allow students to pursue more advanced study in particular disciplines. A proseminar focuses on ongoing research in the field by Northwestern faculty.

For additional information about the Program in Cognitive Science see the program director.

Programs of Study

- Cognitive Science Major (<https://catalogs.northwestern.edu/undergraduate/arts-sciences/cognitive-science/cognitive-science-major>)
- Cognitive Science Minor (<https://catalogs.northwestern.edu/undergraduate/arts-sciences/cognitive-science/cognitive-science-minor>)

COG_SCI 202-0 Evaluating Evidence (1 Unit) Introduction to evaluation of qualitative and quantitative evidence across science, politics, society, health, education, and industry. *Social Behavioral Sciences Distro Area*

COG_SCI 207-0 Introduction to Cognitive Modeling (1 Unit) Introduction to artificial intelligence and cognitive science from a nontechnical perspective. Fundamental questions concerning thinking, beliefs, language understanding, education, and creativity. *Formal Studies Distro Area*

COG_SCI 210-0 Language and the Brain (1 Unit) The study of language and its biological basis from linguistic, psychological, and neuroscientific perspectives. *Natural Sciences Distro Area*

COG_SCI 211-0 Learning, Representation & Reasoning (1 Unit) Interdisciplinary study of the nature of the mind with emphasis on learning, representation, and reasoning. *Social Behavioral Sciences Distro Area*

COG_SCI 220-0 Selected Topics in Cognitive Science (1 Unit) Topics in cognitive science. Content varies. May be repeated for credit with change of topic.

COG_SCI 245-0 Presenting Ideas & Data (1 Unit) Understanding principles of cognitive psychology, data visualization, and graphic design to present ideas and data in an engaging, clear, and memorable manner. PSYCH 245-0 and COG_SCI 245-0 are taught together; may not receive credit for both courses. *Social Behavioral Sciences Distro Area*

COG_SCI 366-0 Cognitive Science Proseminar (1 Unit) New and ongoing research by Northwestern faculty. Prerequisite: consent of instructor.

COG_SCI 398-1 Senior Thesis Seminar (1 Unit) Independent research for a senior thesis under the direction of department faculty. By invitation only.

COG_SCI 398-2 Senior Thesis Seminar (1 Unit) Independent research for a senior thesis under the direction of department faculty. By invitation only.

COG_SCI 399-0 Independent Study (1 Unit) Faculty-directed research. Consent of instructor required.