

## **Cognitive Science Major**

Cognitive Science is the study of cognition from the point of view of information processing. It combines the traditional fields of cognitive and physiological psychology, computer science, philosophy, and linguistics, among other. Topics of focus include perception, memory, reasoning, and language.

The cognitive science program is issue-oriented and relies on methods drawn from a number of disciplines. Students pursuing a major should become familiar with the basic approaches of psychology, philosophy, computer science, and linguistics; while the electives allow students to gain specialized knowledge in a particular area of cognitive science. Thus, with guidance of an adviser in the program, the student designs a course of study concentrating on such a field as computer simulations of psychological processes, computational linguistics, or philosophy and psychology.

Prerequisites:

\_\_\_\_\_ Cognitive Science 2 (identical to Psychology 28)

\_\_\_\_\_ Psychology 10 or Social Science 10 or equivalent

Core:

\_\_\_\_\_ Linguistics 1

\_\_\_\_\_ Computer Science 5

\_\_\_\_\_ Philosophy 26 (Philosophy and Computers) or 35 (Philosophy of Mind)

\_\_\_\_\_ Psychology 64 (Experimental Study of Human Perception and Cognition) or 68 (Human Perception and Cognition), or approved equivalent

One course that satisfies the requirement for a culminating activity, which may be met in one of three ways:

1. completing a senior Honors thesis (Cognitive Science 87)
2. taking an advanced seminar on perception and cognition (Cognitive Science 81); or a relevant advanced seminar in Linguistics (Linguistics 80) or Philosophy (Philosophy 80)
3. carrying out a one or two term independent study project (Cognitive Science 85).

Electives: Five additional courses selected from those listed below. At least two of the four areas must be represented:

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1. Psychology 21 (Perception), 25 (Developmental Psychology), 26 (Introduction to Physiological Psychology), 51 (Issues in Information Processing), 52 (Issues in Learning and Development), 64 (Sensory Psychology), 65 (Physiological Psychology), and relevant seminars in Psychology.
2. Philosophy 6 (Logic and Language), 26 (Philosophy and Computers) 27 (Philosophy of Science), 30 (Theory of Knowledge), 32 (Intermediate Logic), 33 (Philosophy of Logic), 34 (Philosophy of Language), and relevant seminars in Philosophy.
3. Computer Science 18 (Structure and Interpretation of Computer Programs), 25 (Algorithms), 44 (Artificial Intelligence), 49 (Theory of Computation), and 68 (Principles of Computing Languages).
4. Linguistics 10, 21, 22, 23, 25, 26 and relevant seminars in linguistics.