



### COGNITIVE SCIENCE *College of Science, Engineering and Technology*

#### PROGRAM OVERVIEW

Cognitive Science is an interdisciplinary inquiry concerned with understanding the nature and development of such intelligent capacities as perception, language, reasoning, learning and problem solving, whether these capacities are realized in biological or artificial systems. Such inquiry is by its very nature interdisciplinary, integrating methodological, theoretical and practical foci of Biology, Computer Science, Philosophy and Psychology into a single course of study.

Each Cognitive Science major will concentrate in one of the four participating disciplines: Biology, Computer Science, Philosophy or Psychology. The concentration typically requires 24 units of work. In addition to the concentration each student will take core courses from each of the other three participating disciplines. Each core will typically require 12 units of course work, a total of 36 units. A student need not do the core for her or his area of concentration since the core is already included in the concentration.

#### WHAT CAN I DO WITH A COGNITIVE SCIENCE MAJOR?

A cognitive science major is perfect preparation for students who plan to go to graduate programs in cognitive science, cognition, brain and behavior, human-computer interaction, educational technology, artificial intelligence, instructional psychology, cognitive psychology, philosophy, cognitive anthropology and other related fields. Typical employment for a cognitive science undergraduate might be in a technology-related position demanding excellent technical, writing, and speaking skills.

The Cognitive Science Program at Minnesota State University, Mankato is only ten years old, one of the first in Minnesota and the only Cognitive Science Program in the Minnesota State University System. Those who have completed the degree at Minnesota State Mankato have gone to graduate school in cognitive science, biology, computer science, and various fields of psychology. They have found employment in IT fields, pharmaceutical industry lab work, social service settings, and technical writing, among others. For more extensive lists of possible employment opportunities see the website:

- [cognitivescience.case.edu/undergraduate/careers/](http://cognitivescience.case.edu/undergraduate/careers/)
- [www.yale.edu/perception/cogsci/](http://www.yale.edu/perception/cogsci/)
- [cogsci.berkeley.edu/](http://cogsci.berkeley.edu/)
- [www.quora.com/What-can-I-do-with-a-cognitive-science-degree](http://www.quora.com/What-can-I-do-with-a-cognitive-science-degree)

#### PROGRAM FACULTY:

- **Biology:** Dr. Rachel Cohen, Dr. Geoffrey Goellner, Dr. David Sharlin
- **Computer Science:** Dr. Rebecca Bates, Dr. Guarionex Salvia
- **Philosophy:** Dr. Richard Liebendorfer, Dr. Sun Yu, Dr. Julie Wulfemeyer
- **Psychology:** Dr. Bradley Arzenov, Dr. Moses Langley, Dr. Karla Lassonde, Dr. Adam Steiner

## FOR MORE INFORMATION

### Department of Philosophy

Minnesota State University, Mankato  
226 Armstrong Hall  
Mankato, MN 56001

### Phone

507-389-2012 (V)  
800-627-3529 or 711 (MRS/TTY)

### Website

[cset.mnsu.edu/academic-programs/cognitive-science/](http://cset.mnsu.edu/academic-programs/cognitive-science/)

### Program Contact

Dr. Richard Liebendorfer  
507-389-2317  
[Richard.liebendorfer@mnsu.edu](mailto:Richard.liebendorfer@mnsu.edu)

## SAMPLE FOUR-YEAR CURRICULUM (COGNITIVE SCIENCE, BS)

Prerequisites to the Major	Major Common Core
CHEM 201 General Chemistry I (5) MATH 121 Calculus I (4) (choose 3-4 credits) PSYC 201 Statistics for Psychology (4) STAT 354 Concepts of Probability and Stats (3)	Choose one emphasis and three core elective clusters. Major Restricted Electives Choose three of the Core Elective Clusters other than your major emphasis.
<b>Choose 3 Clusters</b>	
CORE ELECTIVE: BIOLOGY BIOL 220 Human Anatomy (4) BIOL 330 Principles of Human Physiology (4) BIOL 324 Neurobiology (3)	CORE ELECTIVE: COMPUTER SCIENCE CIS 121 Introduction to Programming (4) CIS 122 Data Structures (4) CS 230 Introduction to Intelligent Systems (4) CIS 482 Human Computer Interaction (3)
CORE ELECTIVE: PHILOSOPHY PHIL 101W Philosophical Problems: The Mind Body Problem (3) (choose 9 credits) PHIL 410 Philosophy of Language (3) PHIL 474 Philosophy of Mind (3) PHIL 475 Philosophical Issues in Cognitive Science (3) PHIL 480 Philosophy of Science (3) PHIL 481 Philosophy of Biology (3)	CORE ELECTIVE: PSYCHOLOGY PSYC 101 Psychology (4) PSYC 416 Cognitive Psychology (4) (choose 4 credits) PSYC 413 Sensation and Perception (4) PSYC 415 Human Memory (4) PSYC 421 Biopsychology (4)
<b>Choose 1 Major Emphasis</b>	
Biology (26-28) Philosophy (24) Psychology (24) Computer Science (27)	

For additional information about course requirements, please visit [mnsu.edu/academics/academic-catalog/](http://mnsu.edu/academics/academic-catalog/)

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