

COGNITIVE SCIENCE MINOR

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Purpose and Key Features of the Program: Cognitive Science is the study of thinking in all its forms. A Cognitive Science Minor will help students to understand mind, intelligence, and cognition holistically and from multiple perspectives by bringing together and integrating diverse academic disciplines, especially Psychological Science, Philosophy, Computer Science, Modern Languages and Literatures (Linguistics), and Biology.

Interaction with Existing Programs: The Minor in Cognitive Science will complement students' majors in a variety of existing disciplines. The minor's coursework will be drawn primarily (although not necessarily exclusively) from Psychological Science, Philosophy, Computer Science, Modern Languages and Literatures (Linguistics), and Biology. The hope is to attract students from different colleges and schools across campus with diverse majors.

Difference from Other Programs at LMU: Cognitive Science is an area of academic inquiry that overlaps to some extent with Psychological Science but differs from it in at least two key respects: (a) It is an explicitly multidisciplinary and *interdisciplinary* inquiry that draws from a range of departmental offerings, and (b) It focuses on the mind, thinking, and intelligence – in short, on cognition.

Student Learning Outcomes

Students completing a Minor in Cognitive Science will:

- Understand how key concepts, theories, and methodologies from diverse disciplines such as biology, psychological science, neuroscience, linguistics, computer science, and philosophy contribute to the study of cognition/mind.
- Be able to integrate theories and findings from different disciplines to form a coherent understanding of cognitive processes and solve complex problems.
- Value the interdisciplinary study of the mind and intelligent behavior.

Curriculum of the Program

The Cognitive Science Minor requires six courses (three must be upper division):

- PSYC 1000 General Psychology
- An approved methods course. Below is a list of approved courses for the Cognitive Science Minor. If you are interested in a methods course that is not on this list, please contact the director of the program to assess the requested course. Note that some of these courses have prerequisites.
- Three courses approved for the Cognitive Science Minor from at least three of the following disciplines: psychological science (including neuroscience), linguistics, philosophy, computer science, and biology (courses are listed below)
- PSYC 3040 Fundamentals of Cognitive Science

Code	Title	Semester Hours
Required Courses		
PSYC 1000	General Psychology	

PSYC 3040 Fundamentals of Cognitive Science

Approved Methods Courses

Select one of the following:

BIOL 3040	Biostatistical Analysis
ECON 2300	Introductory Statistics
MDLG 3400	Linguistics
CMSI 1010	Computer Programming and Laboratory
PHIL 2010	Logic
PSYC 2001	Statistical Methods for Psychology
SOCL 2000	Qualitative Research Methods
SOCL 2100	Statistics

Approved Courses

Select three courses from at least three different disciplines

<i>Psychology or Neuroscience</i>	
PSYC 2001	Statistical Methods for Psychology
PSYC 2002	Research Methods
PSYC 2003	Brain and Behavior
PSYC 3022	Autism: Mind, Brain, Education
PSYC 3038	Psychopathology
PSYC 3050	Principles of Behavioral Neuroscience
PSYC 3052	Lifespan Development
PSYC 4001	Cognitive Neuroscience
PSYC 4002	Social Psychology
PSYC 4005	Sensation & Perception
PSYC 4036	Personality
PSYC 4052	Evolutionary Psychology
PSYC 4055	Neuropsychology
PSYC 4060	Clinical Neuroscience
<i>Linguistics</i>	
MDLG 3400	Linguistics
MDLG 4400	Selected Topics in Linguistics
SPAN 3410	Spanish Linguistics 1: Sounds and Words
SPAN 3431	Spanish Linguistics 2: Structure and Variation
SPAN 4472	Spanish Language Acquisition
SPAN 4473	The Sounds of Spanish: Theory and Practice
SPAN 4474	Spanish of the Americas
SPAN 4475	Spanish of the United States
<i>Philosophy</i>	
PHIL 2000	Critical Thinking
PHIL 2010	Logic
PHIL 3010	Advanced Symbolic Logic
PHIL 3200	Philosophy of Science
PHIL 4300	Aesthetics
PHIL 4630	Phenomenology
PHIL 4810	Metaphysics
PHIL 4820	Epistemology
PHIL 4830	Philosophy of Mind
<i>Computer Science</i>	
CMSI 1010	Computer Programming and Laboratory
CMSI 2120	Data Structures and Applications
CMSI 2820	Discrete Mathematics for Computer Science
CMSI 3300	Artificial Intelligence

CMSI 3700 Interaction Design

Biology

BIOL 1010 General Biology I

BIOL 3040 Biostatistical Analysis

BIOL 3380 Animal Behavior with Lab

BIOL 4400 Molecular Neurobiology
