

## Requirements for the Cognitive Science Major

### Lower-Division Required Courses:

CSCI1301-1301L Introduction to Computing and Programming  
*MATH 1113 Precalculus is a pre-requisite for this class.*  
LING2100 The Study of Language  
PHIL2010 Introduction to Philosophy  
PHIL2500 Symbolic Logic  
PSYC1101 Elementary Psychology  
STAT2000 Introductory Statistics

### Upper-Division Required Courses:

PHIL/ARTI/PSYC 3550 Introduction to Cognitive Science  
PSYC 4100\* Cognitive Psychology  
And one of the following:  
LING/ENGL 3150 Generative Syntax  
ARTI/PHIL 4550 Artificial Intelligence

### Foundation Areas / Major Electives:

Majors will choose two of the following foundation areas and take at least two classes in each of those areas. Majors are required to take five total courses in the foundation areas with at least 12 of those credit hours being upper-division.

#### Artificial Intelligence Foundations Area:

CSCI 2670 Introduction to Theory of Computing  
CSCI 2720 Data Structures  
CSCI 3360 Data Science I  
CSCI 4330 Artificial Intelligence and the Web  
CSCI 4380 Data Mining  
ARTI/CSCI 4530 Introduction to Robotics  
ARTI/CSCI 4540 Symbolic Programming  
CSCI/PHIL 4550 Artificial Intelligence  
CSCI 4560 Evolutionary Computation  
CSCI 4800 Human-Computer Interaction  
PHIL/LING 4510 Deductive Systems

*\*Majors may take these classes without the PSYC 3980 and 3990 pre-requisites  
No single class may be used to satisfy multiple requirements.  
Students must earn a grade of "C" (2.0) or better in major required courses.*

### Philosophical Foundations Area:

PHIL 3510 Topics in Symbolic Logic  
PHIL 3610 Theory of Knowledge  
PHIL/EECP 4250 Philosophy of Technology  
PHIL/LING 4300 Philosophy of Language  
PHIL 4310 Philosophy of Mind  
PHIL/LING 4510 Deductive Systems  
PHIL/LING 4520 Model Theory  
PHIL/CSCI 4550 Artificial Intelligence

### Psychological Foundations Area:

CBIO/BIOL 3800 Neurobiology  
EPSY 3010S Child and Adolescent Development  
ERSH 4300 Applied Statistical Methods in Education  
PSYC 3980 Research Design in Psychology  
*Restricted to PSYC double-majors only*  
PSYC 4110\* Learning  
PSYC 4120\* Sensation and Perception  
PSYC 4130\* Physiological and Comparative Psychology  
PSYC 4140\* Cognitive Neuroscience  
PSYC 5240\* Judgment and Decision Making

### Language and Cultural Foundations Area:

ENGL 4826 Style: Language, Genre, Cognition  
ENGL/LING 4886 Text and Corpus Analysis  
LING 3060 Phonetics and Phonology  
LING/CMSD 3120 Language Development  
*Some sections restricted to CMSD majors only*  
LING/ENGL 3150 Generative Syntax  
LING 3350 Language Mind and Brain  
LING 4022 Advanced Phonetics and Phonology  
LING/ENGL 4080 Language Variation and Linguistics of Speech  
LING /EPSY 4130 Psychology of Language  
LING 4160 Compositional Semantics  
LING 4400 Quantitative Methods in Linguistics  
LING/CMLT 4740 Discourse Analysis  
PHIL/LING 4300 Philosophy of Language  
PHIL/LING 4510 Deductive Systems