

Requirements for the Cognitive Science Major

Lower-Division Required Courses:

CSCI 1300-1300L Introduction to Programming with Python
Or CSCI1301-1301L Introduction to Computing and Programming
*Notes: MATH 1113 Precalculus is a pre-requisite for this class.
CSCI 1301 is part of the prerequisite chain for further programming classes.*

LING 2100 The Study of Language
PHIL 2010 Introduction to Philosophy
PHIL 2500 Symbolic Logic
PSYC 1101 Elementary Psychology
STAT 2000 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
CSCI(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:

ARTI(PHIL) 4340 Ethics and Artificial Intelligence
CSCI 2670 Introduction to Theory of Computing
CSCI 2720 Data Structures
or CSCI 2725 Data Structures for Data Science
CSCI 3360 Data Science I
CSCI 4330 Artificial Intelligence and the Web
CSCI 4380 Data Mining
CSCI(ARTI) 4530 Introduction to Robotics
CSCI(ARTI) 4540 Symbolic Programming
CSCI(PHIL) 4550 Artificial Intelligence
CSCI 4560 Evolutionary Computation
CSCI 4600 Reinforcement Learning
CSCI 4800 Human-Computer Interaction
LING 4570 Natural Language Processing
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:

ARTI(PHIL) 4340 Ethics and Artificial Intelligence
PHIL(PSYC) 3400 Philosophical Psychology
PHIL 3510 Topics in Symbolic Logic
PHIL 3600 Metaphysics
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 4530 Philosophy of Mathematics
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
LING 4105 Psycholinguistics
PSYC 3100 *when taught with Judgement and Decision Making as the special topic*
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
PHIL(PSYC) 3400 Philosophical Psychology

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 4105 Psycholinguistics
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