Requirements for the Cognitive Science Major

**Lower-Division Required Courses:**
- CSCI 1300-1300L Introduction to Programming with Python
  **Or** CSCI 1301-1301L Introduction to Computing and Programming
  
  *Note: MATH 1113 Precalculus is a prerequisite 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

**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

*Major 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.