B.A., Cognitive Science: Requirements Overview (45 credits)

A few notes: This program has been approved by the Indiana Commission on Higher Education on July 30th, 2025. It will not be accepting new students until the 2027-2028 academic year. To find more detailed information about each course, please visit the Purdue University Catalog: https://catalog.purdue.edu/. This is not an official plan of study, and the final plan may contain some minor changes once published in the University Course Catalog.

AREA A Foundations in Cognitive Science (21 credits)

Courses include a logic requirement fulfilled by either PHIL 15000 or CS 18200, an introductory PSY courses, an introductory SLHS course or LING course, and four PHIL courses with a focus on cognitive science.

AREA B Breadth Requirements (3 credits)

Courses for this requirement come from a variety of disciplines, predominantly with a STEM focus, and that are related to basic concepts in cognitive science.

AREA C Foundations in Philosophy (6 credits)

Courses for this requirement include the option of one course that is directly related to the study of cognitive science from the discipline of philosophy, as well as a course in applied ethics.

AREA D Required focus in biology, computer science, economics, linguistics, psychology, OR statistics (12 credits)

In this area, students will determine an available area for their concentration and will be required to complete four courses in that discipline. Each of these disciplines and their courses are focused on dominant areas of study in cognitive science.

AREA E Research Requirement (3 credits)

This requires students to complete PHIL 41500: Philosophy Practicum, which will be focused on students working in lab spaces and completing research that is relevant to the field of cognitive science.

B.A., Cognitive Science

Requirements (45 credits)

AREA A Foundations in Cognitive Science (21 credits)

Cog Sci majors are required to complete the following:

____ (3) PHIL15000: Principles of Logic OR

____ (3) CS18200: Foundations of Computer Science, AND

____ (3) PSY 12000: Elementary Psychology AND

____ (3) SLHS 22700: Elements of Linguistics OR

____ (3) LING 20100: Introduction to Linguistics AND

____ (3) PHIL 25501: Intro to Cognitive Science: Minds, Brains, and Machines AND

____ (3) PHIL 22100: Introduction to Philosophy of Science AND

____ (3) PHIL 35501: Major Questions in Cognitive Science AND

____ (3) PHIL 45501: Studies in Cognitive Science

AREA B Breadth Requirements (3 credits)

Select ONE course from the following list:

____ (3) ANSC 30300: Animal Behavior

____ (3) BIOL 11000: Fundamentals of Biology I

____ (3) BIOL 11100: Fundamentals of Biology II

____ (3) EDCI 22200: Knowing The World Through Mathematics

____ (3) EDPS 23500: Learning and Motivation

____ (3) ENTM 21000: Introduction To Insect Behavior

____ (3) HIST 30701: History Of Artificial Intelligence: Minds And Machines

____ (3) OBHR 33000: Introduction To Organizational Behavior

____ (3) SOC 34000: General Social Psychology

AREA C Foundations in Philosophy (6 credits)

Select ONE of the following:

____ (3) PHIL25601: Philosophy and Artificial Intelligence OR

____ (3) PHIL 35000: Philosophy and Probability OR

____ (3) PHIL 43200: Theory of Knowledge OR

____ (3) PHIL 46500: Philosophy of Language

AND ONE of the following:

____ (3) PHIL 11100: Introduction to Ethics OR

____ (3) PHIL 11400: Global Moral Issues OR

____ (3) PHIL 20700: Ethics for Technology, Engineering, and Design OR

____ (3) PHIL 20800: Ethics of Data Science OR

____ (3) PHIL24000: Social and Political Philosophy OR

____ (3) PHIL25701: Moral Minds: Introduction to Moral Cognition OR

____ (3) PHIL 27000: Biomedical Ethics OR

____ (3) PHIL 28000: Ethics and Animals OR

____ (3) PHIL 29000: Environmental Ethics OR

____ (3) PHIL 40300: Moral Psychology and Climate Change OR

____ (3) PHIL 41100: Modern Ethical Theories OR

____ (3) PHIL 42400: Recent Ethical Theory

AREA D Required focus in biology, computer science, economics, linguistics, psychology, OR statistics (12 credits)

Select at least FOUR courses from ONE of the following areas: biology, computer science, economics, linguistics, psychology, or statistics:

____ (3) BIOL 20300: Human Anatomy and Physiology I

____ (3) BIOL 20400: Human Anatomy and Physiology II

____ (3) BIOL 23100: Cell Structure and Function

____ (4) BIOL 32800: Physiology

____ (3) BIOL 43600: Neurobiology

____ (3) BIOL 53800: Molecular, Cellular, and Developmental Neuroscience

____ (3) BIOL 56200: Neural Systems

____ (3) BIOL 58705: Animal Communication

____ (3) BIOL 59200: Evolution of Behavior

____ (3) CS 18000: Problem Solving and Object-Oriented Programming

____ (3) CS 18200: Foundations of Computer Science

____ (3) CS 24000: Programming in C

____ (3) CS 24300: Artificial Intelligence Basics

____ (3) CS 25100: Data Structures and Algorithms

____ (3) CS 45800: Introduction to Robotics

____ (3) CS 47100: Introduction to Artificial Intelligence

____ (3) CS 47500: Human-Computer Interaction

____ (3) ECON 25100: Microeconomics

____ (3) ECON 26000: Data Visualization and Inference

____ (3) ECON 30100: Managerial Economics

____ (3) ECON 34000: Intermediate Microeconomic Theory

____ (3) ECON 37200: Experimental Economics

____ (3) ECON 45100: Game Theory

____ (3) ECON 47100: Behavioral Economics

____ (3) LING 20100: Introduction to Linguistics

____ (3) LING 31100: Fundamentals of Phonology and Morphology

____ (3) LING 31500: Elements of Phonetics

____ (3) LING 32100: Foundations of Syntax and Semantics

____ (3) LING 56300: Language Acquisition

____ (3) PSY 20000: Introduction to Cognitive Psychology

____ (3) PSY 22200: Introduction to Behavioral Neuroscience

____ (3) PSY 23500: Child Psychology

____ (3) PSY 24000: Introduction to Social Psychology

____ (3) PSY 27200: Introduction to Industrial-Organizational Psychology

____ (3) PSY 30500: Understanding And Analyzing Psychological Data

____ (3) PSY 30600: Understanding And Analyzing Experiments

____ (3) PSY 31000: Sensory And Perceptual Processes

____ (3) PSY 31100: Human Memory

____ (3) PSY 35000: Abnormal Psychology

____ (3) PSY 40300: Psycholinguistics

____ (3) STAT 11300: Statistics and Society

____ (3) STAT 22500: Introduction to Probability models OR

____ (3) STAT 31100: Introductory Probability OR

____ (3) STAT 41600: Probability

____ (3) STAT 35000: Introduction To Statistics OR

____ (3) STAT 35500: Statistics For Data Science OR

____ (3) STAT 51100: Statistical Methods

____ (3) STAT 41700: Statistical Theory

____ (3) STAT 51200: Applied Regression Analysis

AREA E Research Requirement (3 credits)

Cog Sci majors are required to complete the following:

____ (3) PHIL 41500: Philosophy Practicum

Sample 8 Semester Plan of Study

Semester 1 (15 -17 credits total): • *Area A (3 credits): PHIL 25501* • *Area A (3 credits): SLHS 22700 or LING 20100* • Written Communication - Credit Hours: 3.00-4.00 (CLA Core I: 1 of 6) • World Language Level I - Credit Hours: 3.00-4.00 • Elective - Credit Hours: 3.00	*Semester 2 (15-16 credits total):* • *Area A (3 credits): PHIL 15000 or CS 18200* • *Area A (3 credits): PSY 12000* • Oral Communication - Credit Hours: 3.00 (CLA Core I: 2 of 6) • World Language Level II - Credit Hours: 3.00-4.00 • Elective - Credit Hours: 3.00
Semester 3 (15-16 credits total): • *Area A (3 credits): PHIL 22100* • *Area B (3 credits): Selective* • *Area D (3 credits): Selective* • World Language Level III - Credit Hours: 3.00-4.00 • Science - Credit Hours: 3.00	*Semester 4 (15 -16 credits total):* • *Area A (3 credits): PHIL 35501* • *Area C (3 credits): Selective* • *Area D (3 credits): Selective* • World Language Level IV (CLA Core III; CLA Core I: 3 of 6) - Credit Hours: 3.00-4.00 • CLA Core I: 4 of 6 - Credit Hours: 3.00
Semester 5 (15 credits total): • *Area A (3 credits): PHIL 45501* • *Area C (3 credits): Selective* • *Area D (3 credits): Selective* • Behavioral/Social Sciences (CLA Core I: 5 of 6) - Credit Hours: 3.00 • Information Literacy - Credit Hours: 3.00	*Semester 6 (15 credits total):* • *Area D (3 credits): Selective* • *Area E (3 credits): PHIL 41500* • CLA Core I: 6 of 6 - Credit Hours: 3.00 • Science #2 - Credit Hours: 3.00 • Elective - Credit Hours: 3.00
Semester 7 (15 credits total): • CLA Core II - Credit Hours: 3.00 • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00	*Semester 8 (15 credits total):* • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00 • Elective - Credit Hours: 3.00