

COGNITIVE SCIENCE - CERTIFICATE

Undergraduate students majoring in psychology and neuroscience; philosophy; linguistics; computer science; speech, language and hearing sciences; education; integrative physiology; information science; or architecture and planning may be interested in extending the breadth of their undergraduate studies to earn a certificate in cognitive science.

Training in cognitive science prepares students admirably well for many of the fields that are targeted as the major growth fields of the 21st century: telecommunications, information processing, medical analysis, data retrieval, education and multimedia. As the world is enveloped by the information age, cognitive scientists will be uniquely positioned to deal with this information.

Students interested in the program can learn more on the department's Undergraduate Program (<https://www.colorado.edu/ics/undergraduate-program/>) webpage.

Requirements

To earn the certificate, students must take at least six courses for a minimum of 18 credit hours. Students must receive a grade of C or better in all courses for the certificate and must have an overall grade point average of 3.0 or better.

Additional credit hours may be required as prerequisites to classes chosen to fulfill the certificate plan of study, but these courses usually also fulfill degree requirements. Proposed substitute courses must be preapproved by the ICS Academic Director.

Required Courses and Credits

Code	Title	Credit Hours
Required Courses		
PSYC 2145	Introductory Cognitive Psychology	3
CSCI 3702/ PHIL 3310/ LING 3005/PSYC 3005/SLHS 3003	Cognitive Science	3

Advanced Skills Requirements 12-14

Take a two-course advanced skills sequence from two of the following five areas, one sequence may be in the student's major.

Psychology

Taking classes in the psychology focus area would require a minimum of 7 units, and an additional minimum of 4 units for prerequisites.

PSYC 4145	Advanced Cognitive Psychology
NRSC 4032	Neurobiology of Learning and Memory
PSYC 4155	Cognitive Neuroscience/ Neuropsychology
PSYC 4165	Psychology of Perception
PSYC 4175	Computational Cognitive Neuroscience
PSYC 4220	Language and Mind

Linguistics

Taking classes in the linguistics focus area would require a minimum of 6 units, and an additional minimum of 3 units for prerequisites.

LING 3100	Language Sound Structures
LING 3430	Semantics
LING 4220	Language and Mind
LING 4420	Morphology and Syntax
LING 4560	Language Development

Computer Science

Taking classes in the computer science focus area would require a minimum of 6 units and an additional minimum of 4 units for prerequisites. Choose two of the following:

CSCI 3002	Fundamentals of Human Computer Interaction
CSCI 3202	Introduction to Artificial Intelligence
CSCI 4830	Special Topics in Computer Science

Philosophy

Taking classes in the Philosophy focus area would require a minimum of 6 units, and an additional minimum of 3 units for prerequisites. Two of the following six courses in Philosophy:

PHIL 4300	Philosophy of Mind
PHIL 4340	Epistemology
PHIL 4400	Philosophy of Science
PHIL 4460	Modal Logic
PHIL 4490	Philosophy of Language

Speech, Language and Hearing Sciences

Taking classes in the speech, language and hearing Sciences focus area would require a minimum of 6 units, and an additional 3 units for prerequisites.

SLHS 3006	Phonetics
SLHS 3106	Hearing Science
SLHS 3116	Anatomy, Physiology, and Science of Speech
SLHS 4502	Language Disorders Across the Lifespan
SLHS 4560	Language Development

Total Credit Hours 18-20