

# COGNITIVE SCIENCE

Cognitive Science is the study of human knowledge, of which one aspect is the study of how knowledge is acquired, stored, and represented in the mind, including the mind's underlying biological mechanisms. Another aspect of Cognitive Science concerns how knowledge is understood, remembered, communicated, and used in the performance of activities, including the acquisition and application of skills and information. This latter aspect provides the practical applications of cognitive science, and thereby ensures a demand for graduates in both academic and industrial markets. Training for graduates in cognitive science prepares students admirably 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 services.

The Institute of Cognitive Science (ICS) currently offers two graduate certificate programs: one has a general science focus, the other focuses on human language technology. The cognitive science academic certificate programs are interdisciplinary programs for graduate students in the following departments (see the undergraduate Cognitive Science (<https://catalog.colorado.edu/undergraduate/colleges-schools/arts-sciences/programs-study/cognitive-science/>) page for certification at the undergraduate level):

- Psychology & Neuroscience
- Philosophy
- Linguistics
- Education
- Speech, Language and Hearing Sciences
- Computer Science
- Architecture, Planning and Design (Denver Campus)
- Information Science
- Integrative Physiology

For more information, visit the Institute of Cognitive Science (<https://www.colorado.edu/ics/graduate-programs/>) website or call Donna Caccamise at 303-735-3602.

## Doctoral Degree

- Cognitive Science - Doctor of Philosophy (PhD) (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/cognitive-science/cognitive-science-doctor-philosophy-phd/>)

## Certificates

- Cognitive Science - Graduate Certificate (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/cognitive-science/cognitive-science-graduate-certificate/>)
- Human Language Technology - Graduate Certificate (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/cognitive-science/human-language-technology-graduate-certificate/>)

## Faculty

While many faculty teach both undergraduate and graduate students, some instruct students at the undergraduate level only. For more information, contact the faculty member's home department.

Banich, Marie ([https://experts.colorado.edu/display/fisid\\_120646/](https://experts.colorado.edu/display/fisid_120646/))  
Professor; PhD, University of Chicago

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Assistant Professor; PhD, University of Colorado Boulder

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Professor; PhD, University of California, Berkeley

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Professor; PhD, University of California, San Diego

Penuel, William Richard ([https://experts.colorado.edu/display/fisid\\_149719/](https://experts.colorado.edu/display/fisid_149719/))  
Distinguished Professor; PhD, Clark University

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Professor, Institute Director; PhD, University of Colorado Boulder

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Research Professor; PhD, University of Colorado Boulder

Yaeger, Barbara Jean  
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