Cognitive Science (16CNM)

Description

The Department of Psychology and the Department of Philosophy and Religion offer an interdisciplinary minor in cognitive science. The minor offers the student the opportunity for in-depth study with the framework of the “computer model” of the mind. Students study such topics as the nature of human information processing, the acquisition and use of language, and machine intelligence. No courses for the minor may be taken for S/U credit.

Students completing the minor in Cognitive Science will:

• Possess a background in logic, linguistics, psychology, philosophy, computer science and an appreciation and understanding of contemporary research in cognitive science.
• Be acquainted with the range and nature of problems united under the tile “cognitive science”.
• Have a general understanding of the computational model of the mind and of the ways in which the computer, together with other technical advances, has revolutionized contemporary thinking about the mind.
• Have an in-depth understanding of at least 2 or 3 central empirical issues currently under investigation in the field of cognitive science.
• Have become aware of both the value and difficulty of pursuing interdisciplinary approaches to research question.

Requirements

• A minimum of 15 hours is required for the minor in Cognitive Science
• Students must maintain a grade of ‘C-’ or better in each course used toward the minor.
• Cognitive Science minor courses must include at least 3 of the 5 primary disciplines: philosophy (including logic), psychology, computer science, linguistics, and neurobiology.
• A maximum of TWO (2) course may be used (double-counted) towards both departmental major requirements and minor requirements.

The department will determine whether courses which have been transferred from other institutions qualify for the minor. No more than two courses from other institutions may count toward the minor.

Required Courses (6 credit hours)

Choose 2 of the 3 advanced core courses:

• PHI 425 /PSY 425 Introduction to Cognitive Science (3cr)
• PSY 420 Cognitive Processes (3cr)
• CSC 411 Introduction to Artificial Intelligence (3cr)

Elective Courses (9 credit hours)
- CSC 333 Automata, Grammars, and Computability (3cr)
- CSC 411 Introduction to Artificial Intelligence (3cr)
- ENG 210 Introduction to Language and Linguistics (3cr)
- ENG 324 Modern English Syntax (3cr)
- ENG 524 Introduction to Linguistics (3cr)
- ENG 525 Variety in Language (3cr)
- ENG 527 Discourse Analysis (3cr)
- LOG 335 Symbolic Logic (3cr)
- LOG 435 Advanced Logic and Metamathematics (3cr)
- LOG 437 Model Theoretic Semantics (3cr)
- PHI 331 Philosophy of Language (3cr)
- PHI 332 Philosophy of Psychology (3cr)
- PHI 347 Neuroscience and Philosophy (3cr)
- PHI 425 /PSY 425 Introduction to Cognitive Science (3cr)
- PHI 447 Philosophy, Evolution and Human Nature (3cr)
- PSY 340 Ergonomics (3cr)
- PSY 400 Perception (3cr)
- PSY 420 Cognitive Processes (3cr)
- PSY 430 Biological Psychology (3cr)
- BIO 488 Neurobiology (3cr)

Admissions and Certification of Minor

In both instances, students should contact the contact person listed below. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program. Paperwork for certification can be found in 340 Withers and should be completed no later than during the registration period for the student’s final semester at NC State.

Contact Person

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SIS Code: 16CNM