COGS 100/3.0   **Introduction to Cognitive Science**   **3L**
An introduction to the historical and contemporary issues, and research findings of the core cognitive science disciplines including artificial intelligence, linguistics, philosophy, and psychology. The emphasis will be on the ways that the interactions among these disciplines leads to an enhanced understanding of the processes of intelligence and intelligent systems.
NOTE   Also offered as a distance course. Consult Continuing and Distance Studies.
ONE-WAY EXCLUSION   May not be taken with or after CISC 352/3.0; PSYC 200/6.0.

COGS 201/3.0   **Cognition and Computation**   **3L;1T**
An introduction to the role of computation in theories of the mind and thought. Surveys the major models developed to account for various specific aspects of human cognitive processes. Unitary models of cognitive processes are also examined.
PREREQUISITES   PSYC 221/3.0 or COGS 100/3.0
EXCLUSION   No more than 6.0 units from COGS 200/6.0; COGS 201/3.0; PSYC 220/6.0.

COGS 300/3.0   **Programming Cognitive Models**   **3L;1T**
Systems and techniques for developing computational models of human cognitive processes. Symbolic artificial-intelligence and neural-network approaches. Students will become familiar with the programming language LISP, and use it in implementing some aspects of cognitive models.
PREREQUISITES   (COGS 201/3.0 or COGS 200/6.0 or PSYC 220/6.0) and CISC 352/3.0, or permission of the School.

COGS 400/3.0   **Neural and Genetic Cognitive Models**   **3L**
Neural and genetic computational techniques, along with models of human cognition, perception, and memory built on these methods. Problem-solving techniques that have arisen from neural and genetic computation are also studied, including optimization, classification, and data reduction.
PREREQUISITE   COGS 300/3.0.
EXCLUSION   No more than 3.0 units from COGS 400/3.0; CISC 452/3.0.

COGS 499/3.0   **Advanced Undergraduate Project**   **1.5L**
Topic selected under the supervision of a member of one of the faculties of CISC, LING, PHIL, PSYC. Emphasis may be on experimental, theoretical, or computer implementation topics. Independent research, an oral presentation, and a written report are required.
PREREQUISITE   (Level 4 and registered in a COGS Specialization Plan) and (an overall GPA of 1.90) and (a GPA of 2.60 from 30.0 units in CISC) and (a GPA of 2.60 in COGS) and COGS 300/3.0.