

COT: Computing Theory Courses

Courses

COT 3100 Discrete Structures

College of Sci and Engineering, Department of Computer Science

3 sh (may not be repeated for credit)

Prerequisite: (COP 2253 OR COP 2334 OR COP 3014) AND (MAC 2233 OR MAC 2311)

Foundations of Discrete Math with applications to modeling, programming and data structures. Propositional and predicate logic, number systems and number theory, sequences, summations, graph and tree structures. Prerequisites: (COP 2253 or COP 2334 or COP 3014) and (MAC 2233 or MAC 2311) minimum grade of C-.

COT 4420 Theory of Computation

College of Sci and Engineering, Department of Computer Science

3 sh (may not be repeated for credit)

Prerequisite: COT 3100

Theoretical foundations of computer science. Classification of formal languages, grammars, and automata. Parsing and recognition of syntactic expressions. Turing Machines and random access machines. Church-Turing thesis. Insolvability of the halting problem.

COT 4905 Directed Study

College of Sci and Engineering, Department of Computer Science

1-12 sh (may be repeated indefinitely for credit)

COT 5905 Directed Study

College of Sci and Engineering, Department of Computer Science

1-12 sh (may be repeated indefinitely for credit)

COT 6905 Directed Study

College of Sci and Engineering, Department of Computer Science

1-12 sh (may be repeated indefinitely for credit)

COT 6931 Computer Science Project

College of Sci and Engineering, Department of Computer Science

3 sh (may be repeated for up to 6 sh of credit)

Prerequisite: Completion of 15 hours of college course work is required prior to taking this course.

Capstone course for Masters students who do not elect the thesis option. Normally taken for 3 credits in each of two consecutive semesters. Students will define and carry out a project that shows mastery of some topic in computing and produces some concrete product such as a report or a computer program. Students should not enroll until they have completed at least 15 semester hours of their graduate coursework. Permission is required.

COT 6935 Seminar in Cybersecurity

College of Sci and Engineering, Department of Computer Science

3 sh (may not be repeated for credit)

Prerequisite: CIS 5775 AND ISM 6574; Completion of 18 hours of college course work is required prior to taking this course.

This graduate research seminar will provide cybersecurity graduate students with the opportunity to identify, research, report and discuss contemporary issues in cybersecurity. Students are expected to have completed the foundational courses in the curriculum and to work independently on a relevant topic approved by the instructor.