## CPSC Upper Level Track

### Track 1: Algorithms and Theory

- **CPSC 411** Analysis of Algorithms
- ( ) CPSC 433 Formal Languages and Automata
- ( ) CPSC 440 Quantum algorithms
- ( ) CPSC 442 Scientific Programming

### Track 2: Systems

- ( ) CPSC 410 Operating Systems
- ( ) CPSC 421* Computer Architecture
- ( ) CPSC 456 Real-Time Computing
- ( ) CPSC 462 Microcomputer Systems
- ( ) CPSC 463 Networks & Distributed Prog.
- ( ) CPSC 469 Advanced Computer Architecture

### Track 3: Software

- ( ) CPSC 431 Software Engineering
- ( ) CPSC 432* Programming Language Design
- ( ) CPSC 434 Compiler Design
- ( ) CPSC 437 Engineering Software Products
- ( ) CPSC 438 Distributed Objects Programming

### Track 4: Information and intelligent Systems

- ( ) CPSC 409* Database Systems
- ( ) CPSC 420 Artificial Intelligence
- ( ) CPSC 436 Computer-Human Interaction
- ( ) CPSC 441 Computer Graphics
- ( ) CPSC 444 Structures of Interactive Information
- ( ) CPSC 452 Robotics and Spatial Intelligence
- ( ) CPSC 470 Information Storage and Retrieval

**Notes:**
- Students must take CPSC 411 and six additional courses from the list above.
- At least one course from each track must be taken.
- At least three courses from one track (of the student’s choosing) must be taken.
- The seventh course can be from any track.
- The required course, CPSC 411 (Analysis of Algorithms) counts as one of the courses from the Algorithms and Theory track.
- Prerequisites will still prevail for all courses. Consult the undergraduate catalog for details.
- Approved special topics course (CPSC 489) and graduate courses may be used to fulfill these requirements; each such course will be classified with respect to the tracks; see advisor.
- **CPSC 410 taken before Spring 2009 will not fill this requirement. See the advising office first.**
- *This course number is not yet finalized and may change. See the advising office.*