

## Deleting / Adding Graduate Courses

**Motion.** Delete the following six courses from the Graduate Calendar:

- ▶ CIS\*6000 Distributed Systems
- ▶ CIS\*6090 Hardware/Software Co-Design of Embedded Systems
- ▶ CIS\*6100 Parallel Processing Architectures
- ▶ CIS\*6140 Software Engineering
- ▶ CIS\*6200 Design Automation in Digital Systems
- ▶ CIS\*6490 Analysis and Design of Computer Algorithms

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**Motion.** The council agrees in principle for adding graduate courses on the following topics:

- ▶ Machine Learning for Sequential Data Processing,
- ▶ Human Computer Interaction,
- ▶ Data Science,
- ▶ Advanced Algorithms.

Instructors interested in teaching these courses will finalize course titles, develop course descriptions/outlines, and bring them to council for approval.

# Course Descriptions - Proposed Deletions

For complete course listing:

<https://www.uoguelph.ca/registrar/calendars/graduate/current/gradprog/cis-courses.shtml>

## **CIS\*6000 Distributed Systems U [0.50]**

The evolution of distributed computer systems. Models for distributed processing. Taxonomy of multiprocessor systems. Interconnection networks. Memory and I/O for distributed architectures. Performance of distributed systems. Architectural issues of distributed systems

*Department(s):* School of Computer Science

## **CIS\*6090 Hardware/Software Co-Design of Embedded Systems U [0.50]**

Specification and design of embedded systems, system-on-a-chip paradigm, specification languages, hardware/software co-design, performance estimation, co-simulation and validation, processes architectures and software synthesis, retargetable code generation and optimization.

*Department(s):* School of Computer Science

## **CIS\*6100 Parallel Processing Architectures U [0.50]**

Parallelism in uniprocessor systems, parallel architectures, memory structures, pipelined architectures, performance issues, multiprocessor architectures.

*Department(s):* School of Computer Science

## Course Descriptions - Proposed Deletions

### **CIS\*6140 Software Engineering U [0.50]**

This course will discuss problems where optimization is required and describes the most common techniques for discrete optimization such as the use of linear programming, constraint satisfaction methods, and meta-heuristics.

*Department(s):* School of Computer Science

### **CIS\*6200 Design Automation in Digital Systems U [0.50]**

Techniques and software tools for design of digital systems. Material covered includes high-level synthesis, design for testability, and FPGAs in design and prototyping.

*Department(s):* School of Computer Science

### **CIS\*6490 Analysis and Design of Computer Algorithms U [0.25]**

The design and analysis of efficient computer algorithms: standard methodologies, asymptotic behaviour, optimality, lower bounds, implementation considerations, graph algorithms, matrix computations (e.g. Strassen's method), NP-completeness.

*Department(s):* School of Computer Science