COE718 - Embedded Systems Design

- **Course Outline and Web Page**

  http://www.ee.ryerson.ca/undergraduate/dcd/coe718.html

  http://www.ee.ryerson.ca/~courses/coe718/

- **Key Knowledge to be Acquired**

  Design, prototype and implementation of embedded systems, Exploring State of the art embedded processors such as ARM Cortex M3, Nios-II and other CPU Soft-cores. Embedded system prototyping & implementation, Real-time Operating Systems including RTX for Embedded Applications, software development concepts applicable to real-time and embedded systems, Design of accelerator based Embedded Systems.

- **Key Skills to be Mastered**

  State of the art embedded processors - ARM Cortex processors, hardware/software co-specification of embedded systems, CAD tools for embedded software prototyping, multi-tasking & real-time scheduling for embedded applications, embedded design tools are employed in both laboratories and *projects.*

- ***Potential Careers***

  Embedded system design engineers, computer system engineers, system integration engineers, embedded system test engineers, ...

- **Potential Employers**

  Advanced Micro Devices, DALSA, Atomic Energy of Canada (AECL), PMC-Sierra, Research-in-Motion, ST Microelectronics, IBM Canada, ...

- **Graduate Studies**

  Ryerson, Toronto, Waterloo, UBC, McGill, Alberta, Calgary, etc., have strong graduate programs in embedded systems, micro-systems and advance computer architecture.