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.