

ELE745 – Digital Communication Systems

- **Course Outline**

<http://www.ee.ryerson.ca/~courses/ele745>

- **Key Knowledge to Be Acquired**

Digital communication plays important role in electrical and computer engineering. Student will understand fundamentals of digital communication systems, mainly converting an analog (voice or video) signal in to digital domain via sampling, quantizing, appropriate line coding, pulse shaping, carrier modulation, transmission and (matched filter) detection in Gaussian noise channel.

- **Key Skills to Be Mastered**

Investigating various aspects of digital communications using Matlab codes.

- **Potential Careers**

(Optical, wireless, DSL, cable) communication systems engineers, engineers in other disciplines (VLSI, power systems, biomedical) who will need basic knowledge in digital communications.

- **Potential Employers**

RIM, Rogers, Shaw, Bell Canada, Nortel, Intel, IBM...

- **Graduate Studies**

Calgary, Alberta, Ryerson, Toronto, Waterloo, Queens, UBC, McGill, etc., have strong graduate programs optical and wireless communications.