Wireless Information Networking Post Grad

Length: 60 weeks (4 semesters of 15 weeks)  
Program Code: WIN  
Credentials: Ontario College Graduate Certificate

Start Date: September, January  
Location: Peterborough

PROGRAM HIGHLIGHTS

What the PC meant to everyday life in the late 1980’s, wireless local area networks mean to individuals, businesses, government and other organizations today. Networks, and increasingly wireless networks, are becoming the hub of commercial and industrial development across the world as we understand and experience the benefits of wireless networking for day to day functions including:

- operations monitoring and control
- communications within and between organizations
- information sharing within and between organizations
- mobile real time accounting and cost control
- mobile real time sales support and marketing

At the heart of the wireless world is Wireless Information Networking (WIN), and the growing need for professionals who can develop and implement solutions for the configuration and integration of wireless devices. Capturing data from wireless sensors or wireless synching of mobile devices within secure environments are only a couple of the types of WIN challenges facing businesses, government and organizations today that this program addresses.

Building on the success of our Computer Engineering, Security, and Instrumentation and Control Diplomas this intensive Graduate Certificate program reflects the latest developments in WIN and relies heavily on applied teaching approaches. It focuses on the design, planning, implementation, operation and troubleshooting of wireless networks, and will cover a wide range of topics including:

- network analysis
- server technology
- technical project management throughout technology life cycles
- technology as a service -- preventing network wide service outages
- domestic vs. commercial/industrial needs
- radio technologies -- RF, cellular, microwave and satellite
- wireless LAN and WAN setup, security and troubleshooting
- VOIP
- 802.11 (a, b and g) technologies
- vendor interoperability strategies
- emerging wireless technologies

WHY CHOOSE FLEMING?

To expand and enrich your knowledge in a cutting edge field, you must learn from leading industry experts. Fleming’s WIN instructors are experienced industry professionals at the top of their field. For you this means hands-on, application oriented learning and building of wireless information networks. You will learn by practicing on the equipment used in Industry. While at Fleming you will learn about WIN through a variety of methods such as lectures and labs; analysis of best practices; simulations; guest speakers; field trips; and, applied industry project. During the capstone applied industry project you will work on real life industry WIN problems for real businesses and organizations. This full 15-week experience during the final (4th) semester will demonstrate to others that you can develop WIN solutions to real world business and organization problems.

Students graduating from Fleming’s WIN program will be equipped with the theoretical and practical skills necessary to pursue careers as network professionals. The EDGE focus within the Faculty of Business, Computing and Hospitality is founded on 4 principles:

- Environmental Responsibility: Learn how to contribute to a sustainable future. Ensure your career leaves a green footprint.
- Diversity: Work with a variety of people from faculty, administration, students and members of the community. Learn how to be creative and innovative.
- Global Perspective: Learn to compete on a level playing field in the global market.
- Experience: Gain real experience in your field through case studies, simulations, placements and applied projects.

WHAT IT TAKES TO SUCCEED

- intercultural awareness
- the ability to communicate across cultures and language skills
- well-developed learning skills and attitudes – being able to work independently and as part of a team

CAREER OPPORTUNITIES

For graduates of the WIN program, your specialist knowledge and skills could be used to support and manage wireless information networks in any organization that uses them. You will be qualified for positions in:

- wireless LAN management and support
- wireless service providers
- broadband and mobile communications

ADMISSION REQUIREMENTS

A minimum 15 years of academics in 1st or 2nd Division (Degree or Diploma). A post-secondary degree or advanced diploma in Computer Applications, Information Technology or Software Engineering.

Minimum English language proficiency: IELTS: 6.0

WIRELESS INFORMATION NETWORKING

CURRICULUM

SEMESTER 1
- RF Theory & Antenna Radiation
- Advanced Operating Systems – Unix & Windows
- Broadcast Technology
- Advanced Network Fundamentals
- Advanced Principles of Design
- Enterprise Network Policy and Procedures

SEMESTER 2
- Advanced Firewalls & Intrusion Detection
- VOIP
- Advanced LAN Switching and Wireless
- VOIP Wireless Network Security
- Mobile Broadband Equipment Deployment & Interconnection

SEMESTER 3
- Advanced Accessing the WAN
- Advanced Managing Technical Projects
- Mesh Networking
- RFID
- Advanced Routing Protocols & Concepts
- Wireless Network Analysis & Design

SEMESTER 4
- Applied Project

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