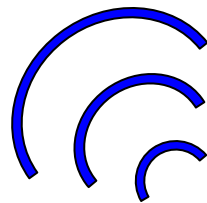


# Champlain

COLLEGESAINTE-LAMBERT

CONTINUING EDUCATION - FORMATION CONTINUE



## WIRELESS NETWORKING



**AEC - LEA.1T**

**(450) 672-7364**

**[www.champlainonline.com](http://www.champlainonline.com)**

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900 Riverside Drive • Saint-Lambert • Québec • J4P 3P2

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# WIRELESS NETWORKING

## AEC - LEA.1T

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### PROGRAM OBJECTIVES

The goals of this program are to train students to perform basic installation, administration and troubleshooting of Wireless Local Area Network (WLAN) equipment. Additionally, by providing students with the appropriate training, the program also aims at preparing graduates to successfully complete the **Certified Wireless Network Administrator (CWNA) certification**.

### CAREER OUTLOOK

This program will provide additional, highly sought after skills that will enhance the chances of graduates for gaining advancement or avoiding layoffs if another downturn in the IT sector should occur. Specifically, it will provide graduates with a sound understanding of the installation, administration, troubleshooting and security for Wireless LAN technology.

### TARGETED CLIENTELE

The *Wireless Networking* program is primarily directed at those who are already working or have worked in the technical side of the computer industry and who wish to upgrade their skills. In general, they will be working in entry-level positions and will see this additional certification as a means to enhance their opportunities for advancement. The prospective candidates will have formal education beyond the high school level and most will have completed at least a CEGEP diploma. They will be technically oriented and comfortable with the hands-on, practical nature of the program.

### ADMISSION REQUIREMENTS

Students must have a Quebec Diploma of Secondary Studies or have received instruction deemed sufficient by the College for potential success in the program, as well as meet the admission criteria for admission to an Attestation of Collegial Studies (AEC) Program. In addition, successful applicants must possess either previous work-related experience or post-secondary studies in Information Technology (specifically in networking). Prospective candidates will be asked to submit a curriculum vitae (CV) and may be interviewed prior to admission to the Program to verify their qualifications.

# ADMISSION CRITERIA

## Attestation of Collegial Studies (AEC)

You are eligible to register in an Attestation of Collegial Studies (AEC) program if you are a Canadian Citizen or Permanent Resident or the holder of a valid Student Visa, and if you have the following:

- A Diploma of High School Studies **OR**
- A College Diploma or a University Degree **OR**
- A partial high school program, coupled with a recommendation from a current or former employer that you would benefit from pursuing your education at the post-secondary level.

**AND**

You meet **one** of the following three conditions:

- You have not been a full-time student for at least two consecutive terms or one school year within the last 12 months.
- You are part of an agreement between the college and an employer, or you are sponsored within the terms of a government program (**EMPLOI-QUÉBEC**).
- You have completed at least one year of post-secondary studies spread over a period of one year or more.

## GENERAL INFORMATION

Total number of hours: 210 hours

Anticipated start date: September 20, 2010

Anticipated end date: January 17, 2011

Schedule: Monday, Tuesday & Wednesday (6:30 p.m. to 10:15 p.m.)

**and**

Alternating Saturdays (9:00 a.m. to 5:30 p.m.)

## PROGRAM CONTENT

Course	Course Title	Hours
420-874-LA	Wireless LAN Fundamentals	45
420-875-LA	Basic Concepts of Radio Frequency (RF) Technology & IEEE Protocols for WLANS	60
420-876-LA	WLAN Design, Installation and Management	60
420-877-LA	WLAN Troubleshooting and Security	45
<b>Total</b>		<b>210</b>

## FEES

Application Fee (new student)

\$30.00

Registration Fee

\$90.00\*

Books

\$300.00\*\*

*\*Fee may vary depending upon Québec Residency Status*

*\*\*Fees for books are approximate*

Please note that if you choose to withdraw from a course(s) or if you fail a course(s), it may affect your student status and you may have to pay tuition fees – (Example - \$2.00 per course hour and a \$20.00 registration fee).

Also, by withdrawing from a course(s) or failing a course(s) within your Attestation program, it may make it difficult or impossible for you to continue with your program at that time or it may delay you in the completion of your program.

***Information and fees are subject to change.***

***In order to more fully ensure that our graduates are competitive in the market place, the College reserves the right to modify portions of this program at any time.***

## **COURSE DESCRIPTIONS**

### **WIRELESS LAN FUNDAMENTALS**

**420-874-LA**

**Pre-requisite: None**

**DESCRIPTION:** This course provides students with an understanding of the major concepts involved in Wireless Local Area Networks (WLANs). The course will begin with a review of computer networking. By the end of the course, students will be able to identify and explain the various components which make up a WLAN, identify the major issues and challenges surrounding wireless networks and describe the wireless LAN architecture. The course will conclude with a review of emerging technologies which are likely to impact the use of wireless networks in the near future.

### **BASIC CONCEPTS OF RADIO FREQUENCY (RF) TECHNOLOGY AND IEEE PROTOCOLS FOR WLANS**

**420-875-LA**

**Pre-requisite: None**

**DESCRIPTION:** This course is designed to provide students with a sound understanding of the basic concepts of RF technology and the industry standards for wireless communications as defined by the IEEE. These concepts form the basis for all WLAN implementations.

### **WLAN DESIGN, INSTALLATION AND MANAGEMENT**

**420-876-LA**

**Pre-requisites: 420-874-LA, 420-875-LA**

**DESCRIPTION:** At the end of this course, students will have a basic understanding of the design elements of a successful WLAN. Students will be able to prepare a basic design for a WLAN, take the necessary steps for its implementation, and then manage the wireless components of a WLAN.

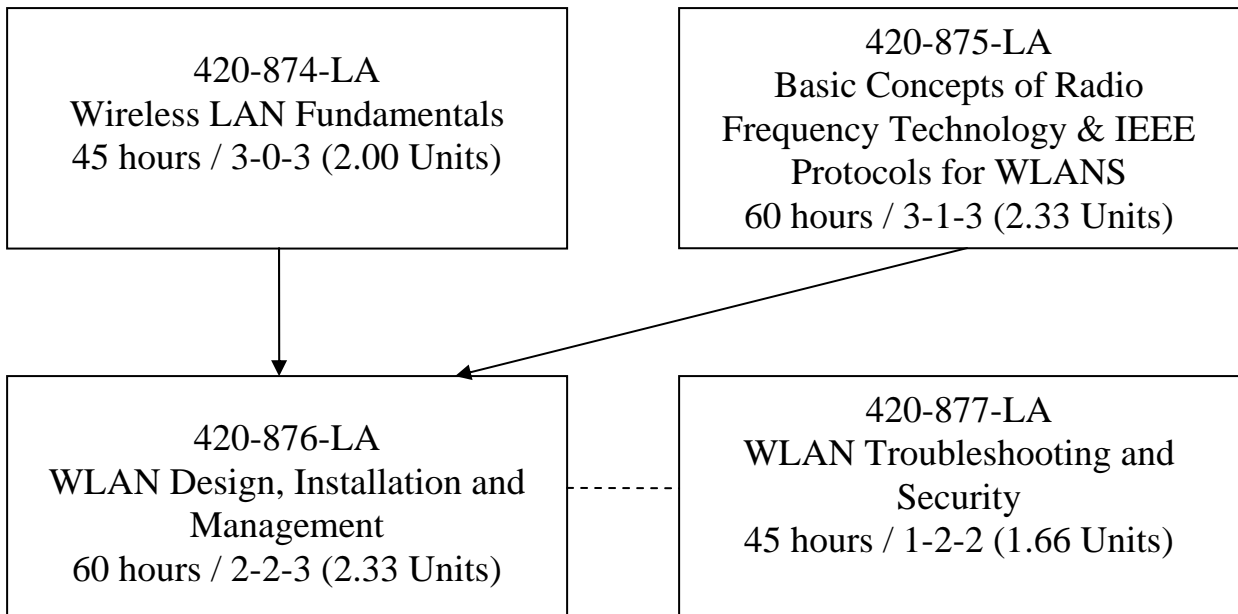
### **WLAN TROUBLESHOOTING AND SECURITY**

**420-877-LA**

**Co-requisite: 420-876-LA**

**DESCRIPTION:** This course is intended to enable students to perform basic troubleshooting operations on a WLAN and identify major security concerns related to WLANs and then take the necessary steps to secure them.

# SEQUENCE OF COURSES



—————> = Pre-requisite  
----- = Co-requisite