Computer Engineering Technician

The Computer Engineering Technician program is unique in Canada as it combines the study of computer and operating systems with the emerging field of custom electronics.

Fleming College

LEARN ◦ BELONG ◦ BECOME

Program Code: CTN
Credential: Ontario College Diploma

Start Date: September, January
Location: Peterborough

PROGRAM HIGHLIGHTS

Home owners and corporations are demanding full integration when it comes to high-end entertainment, multi-room audio and video environmental control and automation of such things as doors, cabinets and lighting. With your custom electronic skills you will work with architects and builders to design, install and network these systems – skills that are in demand in the job market.

You will also learn about solving computer problems that can cause both major costs and setbacks for businesses, whether due to a major hardware failure or a minor software incompatibility. Courses in computer science and custom electronics are complemented by training in oral and written communications, customer relations, and team work. There's plenty of hands-on learning, putting the theory you learn in the classroom into practice.

Upon graduation, you'll have the broad-based, transferable skills that are in demand with a firm foundation for a career designing automation systems for homes and corporations and configuring hardware and software for computer systems. You'll also find opportunities troubleshooting problems in systems both before and after delivery to the customer or client.

During your studies, you can obtain **Cisco Networking certification**.

This program has received National Accreditation through the Canadian Technology Accreditation Board. Graduates are recognized by the Ontario Association of Certified Engineering Technicians and Technologists as meeting all the academic requirements for certification in the Certified Engineering Technician (Ctech) category.

You have the opportunity to transfer to the three-year Computer Engineering Technology diploma.

WHY CHOOSE FLEMING

Smaller classes mean more attention from dedicated faculty to help you meet challenges, and our broad-based approach to instruction will ensure versatility in your future career.

This program will prepare you for a career in today's ever-changing world. 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.

Develop your EDGE at the Faculty of Business, Computing and Hospitality.

IS THIS YOU?

These traits and abilities will help you succeed:

- curiosity about how computers work
- enjoy working with people/teams
- interested in working hands-on with the latest audiovisual and computer technology
- excellent analytical skills (important for problem solving)
- experience working with computers, programming an asset

CAREER OPPORTUNITIES

Employment opportunities for skilled technicians are available in a wide range of organizations, including work in home theatre and media room installation, home and corporate networks, smart boardroom or classroom electronics, electronic manufacturing industries, technical sales and support, or service and repair centres.

The job market for computer and custom electronics professionals is strong, and technology's hottest jobs include custom audiovisual systems and computer networking. Salaries start at around $35,000.

There are also excellent opportunities to start your own business.

MINIMUM ADMISSION REQUIREMENTS

Higher Secondary Certificate or Standard XII with a minimum 50% average. Minimum English language proficiency: IELTS: 6.0.

Not for UG degree holders.

COMPUTER ENGINEERING TECHNICIAN

CURRICULUM

PROGRAM	CODE
SEMESTER 1	
Applied Mathematics for Technology I	MATH0018
Computer Hardware	COMP0191
Electricity	ELCT0084
Software Fundamentals	COMP0086
Career Essentials	ORGB0002
Technical Communications	COMM0032
SEMESTER 2	
Applied Mathematics for Technology II	MATH0037
Electronics	ELCT0082
Intro to Microprocessors	ELCT0019
Network Fundamentals	COMP0053
Operating Systems I	COMP0091
Programming in C++	COMP0080
Developing Effective Teams	ORGB0013
SEMESTER 3	
Commercial and Consumer Electronics	ELCT0080
Computer Hardware	COMP0191
Computer and Network Security	COMP0013
Operating Systems II	COMP0075
Professional Practice	GNED0092
Routing Protocols and Concepts	COMP0371
SEMESTER 4	
Accessing the WAN	COMP0092
Integrated Systems Programming	ELCT0081
LAN Switching and Wireless	COMP0070
Managing Technical Projects	ELCT0020
Network Cabling	ELCT0074