

Computer Engineering Technology



Program Location:	Peterborough
Program Code:	CTY
Co-ordinator:	Ron Walker
Credential:	Ontario College Advanced Diploma
Start Date:	September 04, 2012
Tuition Fees:	\$1,864.70 per semester. Tuition and fees subject to change.

With the three-year Computer Engineering Technology program, you can expand your repertoire of skills and knowledge to open up interesting and rewarding career opportunities.

Program Highlights

Beyond the technician level training, computer engineering technologists add analysis, design, project management and enhanced applied technology skills. You'll apply this knowledge to the analysis and design of complex computer systems and networks.

You'll have open access beyond classroom time to our lab facilities - time to explore and learn, hands-on. Your ability to work effectively as a member of a technical team will also be further developed through course studies and a full-semester team-based project.

- This program has recently received National Accreditation with the Canadian Technology Accreditation Board. Graduates are recognized by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) as meeting all the academic requirements for certification in the Certified Engineering Technologist (CET) category.

Success Stories

Recent Grad Chris Rice was hired by Bryston Ltd., Canada's leading manufacturer of high end audio electronics, to create the user interface for the new Bryston Digital Player (BDP-1). Rice is also now teaching the Technical Programming course within the Computer Engineering program. The digital player was nominated for Best New Product Award at the 2011 International Consumer Electronics Show. Read more about Chris Rice and his Bryston experience in The Ontario Technologist, March/April 2011 issue (see "Learning Curve").

Why Choose Fleming

Through our relationships with partners and industry leaders, we're able to assist our grads to satisfying careers in the field upon graduation.

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.

Work Experience

Applied Projects @ Fleming

In your final semester you will work on an intensive team project. Each member of the team will contribute specialized knowledge, learned in his or her program of study, to the solution of a real-world technological problem posed by a sponsoring business or organization. This project will enhance problem-solving skills, applied industry knowledge, and the ability to work as part of an engineering/development team. You'll also learn critical workplace skills such as time management, how to map a critical path, and presentation skills. Since you may be working on sophisticated developmental or research based work, sponsors will often use the project as a testing ground and recruitment opportunity.

Is this You?

This program and career require:

- curiosity about how computers work
- ability to explain computing issues to others
- self-motivation
- ability to be a team player
- excellent listening skills
- enjoy working with people

Career Opportunities

Graduates of this program have found positions as members of research and development teams composed of engineers, technologists, and technicians. In addition, many have found positions as field service or customer representatives for equipment suppliers. Because of their more comprehensive education, graduates often eventually assume administrative responsibilities within their organizations. Your broad-based, transferrable skills will be to your benefit. For example, Robert Half Technology, the leading resource on IT hiring and employment trends, reports in its recent Salary Guide that the long-range outlook for IT professionals is strong, and technology's hottest jobs include network systems and data communications analysts, network and computer systems administrators, and computer systems analysts. Sample job titles include:

- embedded software developer
- computer operations supervisor
- computer systems analyst
- server administrator
- network administrator
- LAN manager

Graduates are in very high demand, with starting salaries in the \$35,000 to \$40,000 range.

Minimum Admission Requirements

OSSD with the majority of credits at the College (C) and Open (O) level, including: PRINTED ON: MAY 24, 2012

- 2 College (C) English courses (Grade 11 or Grade 12)
- 2 College (C) Math courses (Grade 11 or Grade 12)

When (C) is the minimum course level for admission, (U) or (U/C) courses are also accepted.

Mature Students

If you are 19 years of age or older before classes start, and you do not possess an OSSD, you can write the Canadian Adult Achievement Test to assess your eligibility for admission. Additional testing or academic upgrading may be necessary to meet specific course requirements for this program.

Additional Costs

Plan on \$400 per year for books and supplies.

Transfer Agreements

We are committed to providing students and graduates with flexible options to get maximum recognition of their college studies. Through joint programs and transfer agreements with the following universities, you can apply the learning you acquire at Fleming College to earn a related degree in less time, and at less cost.

- Australian Catholic University National
- Bemidji State
- Lakehead University
- Laurentian University
- Trent University
- University of Ontario Institute of Technology
- University of Windsor

Curriculum for Computer Engineering Technology

Semester 1

Code	Course Name	Hours
MATH 18	Applied Mathematics for Technology I	60
COMP 191	Computer Hardware	45
ELCT 84	Electricity	60
COMP 86	Software Fundamentals	60
COMM 32	Technical Communications	37
ORGB 2	Career Essentials	45

Semester 2

Code	Course Name	Hours
MATH 37	Applied Mathematics for Technology II	45
ELCT 82	Electronics	60
ELCT 19	Intro to Microprocessors	45
COMP 53	Network Fundamentals	60
COMP 91	Operating Systems I	45
COMP 80	Programming in C++	45
ORGB 13	Developing Effective Teams	45

Semester 3

Code	Course Name	Hours
ELCT 80	Commercial and Consumer Electronics	45
COMP 191	Computer Hardware	45
COMP 13	Computer and Network Security	45
COMP 75	Operating Systems II	45
GNED 92	Professional Practice	45
COMP 371	Routing Protocols and Concepts	45

Semester 4

Code	Course Name	Hours
COMP 92	Accessing the WAN	45
ELCT 81	Integrated Systems Programming	75
COMP 70	LAN Switching and Wireless	45
ELCT 20	Managing Technical Projects	45
MATH 98	Math for Technology III	0
ELCT 74	Network Cabling	45

Semester 5

Code	Course Name	Hours
COMP 37	Embedded Networking and Computing	45
MATH 22	Mathematical Modelling	60
COMP 69	Network Analysis	60
COMP 237	Operating Systems Theory	45
COMP 412	Principles of Design	45
GNED 42	Working With Business and Industry	45

Semester 6

Code	Course Name	Hours
APST 7	Applied Project (CTY)	350

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