INFO366 - Operating Systems III Continues its discussion of Operating Systems. Topics covered include network configuration, DNS, introductory security, introductory backup policies, file systems, networked file systems, performance, and server configurations. Emphasis will be on UNIX and its implementation of the topics mentioned.

INFO375 - Networks III Continues the teaching of practical and theoretical networking. Emphasis will be on Switching technologies. Theory topics include Layer 2 switches, Layer 3 switches, VLANs, Frame Relay, and ATM cell switching concepts. Network Planning, Operation and Management will also be introduced. Practical topics will include the implementation of the various technologies in a mini-WAN/ LAN environment.

INFO380 - Web Servers An introduction to Web servers. Topics include installation, configuration, maintenance, security, performance, and database connectivity using server side programming. Initial implementation will be on Microsoft's Internet Information Server (IIS). Emphasis however will be on developing a general knowledge of all the aspects of a Web server in a Unix environment.

INFO381 - Mail Servers An introduction to Mail servers. Topics include installation, configuration, maintenance, load balancing, security, server protocols (IMAP, POP3), and enterprise level mail solutions. Emphasis will be on developing a general knowledge of all the aspects of a Mail server.

INFO435 - Systems Analysis An introduction to systems analysis with the main focus on evaluating different technologies for implementation. Early adoption of technologies will be discussed. This course will work in close conjunction with the Implementation course. Real life case studies will be presented with their solutions.

INFO445 - Systems Implementation An extension of the systems analysis course to allow the students to implement and propose their own solutions to different case studies.

INFO455 - Ethics, Policies, and Contracts An introduction to ethics, policies, and contracts as they related to the IT field. Topics include ethics issues relating to network administration, different corporate policies, system policies, types of contracts, the need for contracts, and the creation of contracts. Emphasis will be on teaching the students the importance of the topics and where to find resources to assist them.

INFO466 - Operating Systems IV Continues the discussion of operating systems. Topics include network interconnection, security, backup, policies, file systems, network file systems in an advanced context as well as in a global or enterprise level setting. Emphasis will be on the enterprise level.

INFO475 - Networks IV An introduction to network management for Novell, UNIX, and Windows NT. Topics include SNMP, MIBS, RMON and RMON2. Emphasis will be on utilizing the different tools and their strengths and weaknesses.

MNMT190 - Professional Development I An introductory course which will help students establish a solid foundation for individual adjustment and effective social functioning. Emphasis will be on the psychological dimensions of communication, factors influencing interpersonal relations, and personal growth and development.

MNMT290 - Professional Development II Using both an academic and experiential approach, students will (a) be introduced to both the theory and research findings needed to understand what makes teams effective and (b) develop the skills required to apply that knowledge in practical situations. As today's organizations rely on team-oriented employees for creative, dynamic product development and solution generation, it is essential to be prepared to compete.

MNMT390 - Professional Development III Today's business environment, and particularly IT, is cleary client driven. This course helps the student to develop the skills required to be effective in a quality-oriented team environment. Team development skills, quality concepts, and ethical decision-making principals are developed through case study, research, lecture, interview and presentation modes. Emphasis is placed on ethical dilemmas facing the IT professional in today's global environment.

MNMT490 - Professional Development IV Introduces the student to the role of the Human Resource function in an organization. It will detail the various activities i.e. job analysis, job description, recruitment, selection, orientation, training, health and safety (WHMIS), compensation, benefits, labour relations legislation, HR issues, etc. These will be explored from the perspective of both the employer and the employee. Job search skills and resume writing will also be included.

Application Procedure

In order to apply for admission to this program an applicant must complete an "Application for Admission to Ontario Colleges of Applied Arts and Technology" form and submit this form to the:

Ontario College Application Services
P.O. Box 810, Guelph, Ontario, N1H 6M4
1-888-892-2228

Application Forms and Applicant Guidebooks are available at Ontario Secondary Schools, at Ontario Colleges of Applied Arts and Technology and at the Ontario College Application Services office.

Admission to the College

Complete information concerning admission to programs at Fanshawe College may be found in the Central Admission Publication located in the Office of the Registrar, Fanshawe College.

The College reserves the right to make changes in the information in this brochure without prior notice.

The College reserves the right to cancel at any time a program, course, program major or option, change the location and/or term in which a program or course is offered, or withdraw an offer of admission both prior to and after its acceptance by an applicant or student because of insufficient applications or registrations, over-acceptance of offers of admission, budgetary constraints, or for other such reasons. In the event the College exercises such right, the College's sole liability will be the return of any monies paid by the applicant or student to the College.

This brochure is available in alternative formats, upon request, for persons with disabilities.

For further information on admission and registration, contact:
Office of the Registrar, (519) 452-4277

For further specific program information, contact:
Information Technology Division: (519) 452-4291
St. Thomas Campus: (519) 633-2030

Fanshawe College
1460 Oxford St. E. P.O. Box 7005
London, ON, N5Y 5R6

www.fanshawec.on.ca

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Fanshawe COLLEGE

Computer Systems Technician

FANSHAWE COLLEGE

Community Driven... Student Focused

Computer Systems Technician

A Co-Operative Education Program (Optional)
A Two Year Diploma Program
Program Code: CTN1 Campus Code: LC, TC
LC: September Admission TC: September Admission
Information Technology Division: (519) 452-4291
St. Thomas Campus: (519) 633-2030
Average Salary: N/A

Current Grade 9 and Grade 10 Secondary School students considering admission to this program for September, 2003 and beyond should consult the 2001/2002 Fanshawe College Program Guide for the academic admission requirements for 2003/2004.

This two year, co-operative education diploma program provides comprehensive training for students wishing to work in either network technical support or help desk support. The program will provide exposure in all areas of network installation and configuration. As well, students will be trained in the use of popular application software products such as Microsoft Office. Program content will be such that students should be prepared to take exams for various industry certificates. It is comprised of four academic levels and two optional co-operative education work terms.

Career Opportunities

Technical support positions for computerized businesses especially organizations having small and large networks, help desk operations.

CTN11	Level 1	Hrs/Wk
CASL170	Touch Typing Skill Development I	2.0
CMNN100	Communication for Computer Technicians	3.0
COPT151	Computer Applications Level I	3.0
INFO115	Introduction to Databases	4.0
INFO145	Programming I	3.0
INFO166	Operating Systems I	4.0
INFO175	Networks I	5.0
MNMT190	Professional Development I	3.0

CTN12	Level 2	Hrs/Wk
CASL170	Touch Typing Skill Development I	2.0
INFO235	Computer Hardware	3.0
INFO245	Programming II	2.0
INFO266	Operating Systems II	5.0
INFO275	Networks II	5.0
INFO285	System Documentation and Procedures	3.0
MNMT290	Professional Development II	3.0

CTN13	Level 3	Hrs/Wk
INFO330	Software Deployment	2.0
INFO340	Database Servers	3.0
INFO366	Operating Systems III	5.0
INFO375	Networks III	5.0
INFO380	Web Servers	3.0
INFO381	Mail Servers	2.0
MNMT390	Professional Development III	3.0

CTN14	Level 4	Hrs/Wk
INFO435	Systems Analysis	3.0
INFO445	Systems Implementation	3.0
INFO455	Ethics, Policies, and Contracts	3.0
INFO466	Operating Systems IV	5.0
INFO475	Networks IV	5.0
MNMT490	Professional Development IV	3.0

Program Eligibility Criteria

Required Academic Preparation

OSSD with courses at the General Level with:
- Grade 12 English
- Grade 12 Mathematics*

Or
BTSD-Level 4 Certificate
Or
Ontario High School Equivalency Certificate (GED) and:
- Grade 12 Mathematics*

Or
Mature Applicant with standing in the required courses stated above

Notes:

1. * The following mathematics courses meet the entrance requirements:
   - Grade 12 Mathematics for Business and Consumers
   - Grade 12 Mathematics for Technology
   - Grade 12 Mathematics, Advanced
   - OAC Finite Mathematics
2. Applicants who do not have standing in Grade 12 Mathematics may still gain eligibility for admission by completing the pre-admission mathematics testing and upgrading offered by Fanshawe College.

Recommended Academic Preparation

- Grade 12 English, Advanced
- Grade 12 Mathematics, Advanced
- Grade 11 or Grade 12 Computer Studies courses

Applicant Selection Criteria

Where the number of eligible applicants exceeds the available spaces in the program, the Applicant Selection Criteria will be:

A. Preference for Permanent Residents of Ontario.
B. Receipt of Application by February 1st.
C. Achievement in the required academic preparation.
D. Achievement in the recommended academic preparation.

Approximate Costs (2000/2001)

Fees for:	Levels 1 & 2 $2143.90* (London Campus) $2010.90* (St. Thomas/Elgin Campus)
Books and Supplies:	$ 980.00
Fees for:	Levels 3 & 4 $2143.30* (London Campus) $2010.90* (St. Thomas/Elgin Campus)
Books and Supplies:	$ 200.00 plus textbook costs available in September 2000

*additional fees are required for the co-op option

Course Descriptions

CASL170 - Touch Typing Skill Development I An introduction to touch typing for keying the alphabet, numbers, symbols, and numeric keypad. Students will achieve a speed of 30 wpm with 5 errors or less using a computer-based program.

CMNN100 - Communication for Computer Technicians Provides computer systems technicians with written and oral communication skills needed to effectively present technical information. Topics include writing letters, memos, e-mail messages and short reports using correct grammar, punctuation and spelling. Oral presentations will be used to practise verbally disseminating system procedures to a variety of clients.

COPT151 - Computer Applications Level I Students will be introduced to software applications used in the workplace. The fundamentals of the Windows operating system, Microsoft Word, Microsoft Excel, and the Internet are introduced.

INFO115 - Introduction to Databases An introduction to the design and management of relational database systems using Microsoft Access as the learning platform. Data modeling techniques using Entity Relationship diagrams is introduced. The path from data analysis to design to implementation of a database will be explored using case studies. As well, the student will learn how to manipulate data using Structured Query Language (SQL) statements.

INFO145 - Programming I An introduction to program design and construction using Visual Basic. Topics include variables, statements, expressions, assignments, looping structures, decision structures, and routines. The emphasis is on teaching the fundamental programming aspects that can be applied to all languages including scripting languages.

INFO166 - Operating Systems I An introduction to computer hardware and basic operating systems concepts. Topics include DOS, command line interfaces, internal OS structures, programs, and file systems. Emphasis will be on concepts that are common to Novell's NetWare, Unix, and Windows NT systems.

INFO175 - Networks I An introduction to both the theory and hands on aspects of computer networking. Theory topics include introduction to LAN topologies (logical), data communication concepts, packet structures, and introduction to the OSI model and TCP/IP. Practical topics include physical topologies, such as cabling, rings, buses, hubs, switches, routers, and network interface cards. Emphasis will be on concepts that are common to all Network Operating Systems.

INFO235 - Computer Hardware An intermediate course on computer hardware. Topics include motherboards, microprocessors, memory, buses, expansion slots, expansion cards, ports, power supplies, video displays, and hard drives. Emphasis will be on assembling and troubleshooting a system.

INFO245 - Programming II An intermediate course in computer programming. Topics include data control, debugging, error handling, API functions, and object-oriented techniques using the Visual Basic programming language.

INFO266 - Operating Systems II An introduction to the Windows NT Server operating system. Topics will the installation and ongoing maintenance of Windows NT domains, installing and setting up Windows NT and Windows 95 clients, and the use of various tools for the configuration of the domain.

INFO275 - Networks II Continues the introduction to networking. Theory topics include the Wan technologies, PPP, ATM, and Routing protocols (RIP, RIP2, OSPF, BGP4). Advanced OSI model concepts and TCP/IP will be covered in depth, utilizing packet captures and protocol analysis. Practical topics include bridges, routers, hubs, and gateways. Emphasis will be on topics that are common to Novell, Unix, and NT systems.

INFO285 - System Documentation and Procedures Students will augment design and installation processes with documentation detailing setup and configurations, write end user procedures for various routines, write help files for the Web, and respond to requests for technical information and/or assistance via various mediums including e-mail using appropriate language and tone.

INFO330 - Software Deployment An introduction to software deployment on a large scale including project management. Topics include licensing, client solutions, contingency plans, implementation schedules, liabilities, testing implementations, client server solutions, and ghosting. The emphasis is on managing the process of software deployment and its lifecycle.

INFO340 - Database Servers Continues the development of the design and management of client based database systems and introduces server-based database systems such as SQL Server and Oracle. Topics include installation, configuration, maintenance, security, and remote access as well as their relative strengths and weaknesses.