



Information Technology and computer specialists are in constant demand. Our offerings respond to industry need through programs designed by Computer and IT professionals. Choose to make yourself more marketable through relevant and up-to-date computer training and prepare yourself to become a computer or IT professional and/or upgrade your skills.

PROGRAMS

- Advanced Java 2 EE Enterprise System Design and Programming41
- Cisco Networking Associate.....43
- Cisco Networking Professional43
- Computer Forensics45
- Computer Hardware and Network Support44
- Computer Programming41
- Computers in Business Management.....41
- IBM Java41
- IT Client Services.....41
- Linux System Specialist.....44
- Microsoft .Net.....41
- Microsoft Office Application Support43
- Microsoft Sharepoint Specialist.....42
- Network Security Administrator45
- Network Specialist Post-Graduate44
- Oracle Database Administrator Professional42
- Oracle Database Associate.....42
- Software Quality Assurance And Testing (SQAT)42
- UNIX/Linux Systems Administration.....45
- Voice Over Internet Protocol (VoIP).....44
- Web Applications Development Programming.....42
- Wireless Technologies44

COURSES

A+ Boot Camp	45	Java Enterprise Programming With IBM's Rational Application Developer	50
A+ Essentials for PC Repair and IT Technician	45	Linux in the Enterprise Enviroment	50
Advanced Voice Communications	45	Linux Networking Essentials	50
Advanced VoIP	45	Linux Optimization Techniques	51
Authentication	46	Linux Security	51
Broadband Wireless	46	Linux System Administration	51
Building a VoIP Network Using Open Source Software and Tools	46	Linux System Overview	51
Capstone Project	46	Managing the Testing Process	51
CCNA 1 Network Fundamentals	46	Microcomputer Applications Software 1	50
CCNA 2 Routing Protocols and Concepts	46	Microcomputer Applications Software 2	49
CCNA 3 LAN Switching and Wireless	46	Microsoft Access	51
CCNA 4 Accessing the WAN	46	Microsoft Access – Advanced	51
CCNA Boot Camp	46	Microsoft Applications with VBA	51
CCNA Security – NEW	46	Microsoft Excel	51
CCNP 1 Implementing IP Routing	47	Microsoft Excel – Advanced	51
CCNP 2 Implementing IP Switching	47	Microsoft Office Integration	143
CCNP 3 Maintaining And Troubleshooting IP Networks	47	Microsoft Powerpoint – Comprehensive	51
Cellular Networks	47	Microsoft Word	51
Computer Hacking and Incident Analysis	47	Microsoft Word – Advanced	52
Content Filtering	47	Monitoring and Intrusion Detection	52
Data Forensics 1 – Introduction	47	Network Design	52
Data Forensics 2 – Advanced	47	Networking Fundamentals	52
Database Design & Modeling With Microsoft SQL Server 2008	47	Open Source Java EE Enterprise System Design and Programming	52
Designing and Implementing a VoIP Solution	48	Oracle Database Administration Fundamentals 1	52
Developing Java Applications With IBM'S Rational Application Developer	48	Oracle Database Administration Fundamentals 2	52
Developing Web Applications With Visual Studio.NET	48	Programming 1 (Introductory Programming Concepts)	52
Developing Windows Applications With VB.NET	48	RF Technology	52
Developing XML Web Services With Visual Studio.NET	48	Selecting and Implementing Software Testing Tools	53
Field Placement	48	Sharepoint Customization and Deployment	53
Forensics	48	Sharepoint MOSS Advanced Features	53
Fundamentals of Information Security	48	Sharepoint Workflow & Infopath	53
Installing & Configuring SharePoint	48	Software Quality Assurance	53
Interconnection LANs	49	Software Testing Automation Tools and Best Practices	53
Introduction to Database Concepts	49	TCP/IP and Other Internet Protocols	53
Introduction to Java Programming Using IBM's Rational Application Developer	49	Threats and Attacks	53
Introduction to LANs	49	UNIX/Linux Installation	53
Introduction to .NET Programming With C#	49	UNIX/Linux Operations For Users	53
Introduction to .NET Programming With VB.NET	49	UNIX/Linux Security	53
Introduction to Oracle SQL	50	UNIX Shell Scripts	53
Introduction to SharePoint	48	UNIX Systems Administration	53
Introduction to Testing Principles & Methodologies	50	Voice Over IP – An Introduction	54
Introduction to UNIX/Linux	50	Wide Area Networking	54
Introductory Network Security	49	Wireless Communications	54
Intrusion Detection and Auditing	50	Wireless LANs	54
J2EE 5 Enterprise Programming With IBM's Rational Application Developer	50	Working With Linux Graphical User Interfaces	54
		Writing Testable Requirements	54

Computer Training for Professionals

FREE SOFTWARE DOWNLOAD

Please note: Microsoft Office Suite and FrontPage software are not included in this offer.

All students registered in computer courses in the School of Continuing Education may be eligible to download the professional version of many Microsoft software titles free-of-charge. For details and a complete listing of what is available, please visit our electronic storefront at http://msdn08.e-academy.com/centennial_sce.

COMPUTER PROGRAMMING CERTIFICATE – 7015

Upon successful completion, you will understand basic computer concepts and be able to use contemporary software packages and to acquire strong programming in skills in various languages.

COMPLETION REQUIREMENTS

FOUR mandatory courses:

Programming 1	COMP-100	p. 52
Microcomputer Applications Software 2	COMP-126	p. 49
ERP and Business Solutions	CEOA-253	p. 143
UML Modeling with Casetool (offered online ONLY)	CEOA-400	p. 142

Plus THREE of the following elective courses:

Any courses from either the IBM Java OR the Microsoft.Net stream

COMPUTERS IN BUSINESS MANAGEMENT CERTIFICATE – 7047

This program provides training mainly in business software applications. It combines accounting and other microcomputer applications to prepare you to perform effectively in a business office.

COMPLETION REQUIREMENTS

FOUR mandatory courses:

Financial Accounting 1	ACCT-112	p. 10
Microcomputer Applications Software 1	COMP-106	p. 50
Microcomputer Applications Software 2	COMP-126	p. 49
Introduction to Canadian and International Business	GNED-119	p. 62

Plus THREE of the following elective courses:

Small Business Software (Simply Accounting)	ACCT-150	p. 12
Accounting Microcomputer Applications 1	ACCT-228	p. 9
Business Communications	BUSN-333	p. 15
Programming 1 (Introductory Programming Concepts)	COMP-100	p. 52
Microsoft Applications with VBA	COMP-470	p. 51

IT CLIENT SERVICES CERTIFICATE – 7020

Helpdesk staff are the front line to client support. They make the first and most impressionable contact with clients. This should be an excellent service experience for clients and as many concerns as possible should be resolved in this first contact.

COMPLETION REQUIREMENTS

FOUR mandatory courses:

Microcomputer Applications Software 1	COMP-106	p. 50
Microcomputer Applications Software 2	COMP-126	p. 49
A+ Essentials for PC Repair and IT Technician	CCTC-103	p. 45
Office Communications and Procedures	OAGN-125	p. 19

Plus THREE of the following elective courses:

Linux Systems Overview	CCTC-404	p. 51
Web Fundamentals	CG-093	
Programming 1 (Introductory Programming Concepts)	COMP-100	p. 52
Introduction to .Net Programming with VB.NET	CEDN-001	p. 49
Microsoft Applications with VBA	COMP-470	p. 51

IBM JAVA CERTIFICATE – 7387

Java is a powerful object-oriented language with cross-platform capabilities that has become the programming language of choice for developing various types of business applications. Java is used widely for creating web applications and many e-Business applications. IBM's Rational Application Developer is a very popular integrated development environment for designing, coding, testing and deploying both Standard and Enterprise Java applications. The program also provides preparation for IBM Java Certification exams.

COMPLETION REQUIREMENTS

Introduction to Java Programming using IBM's Rational Application Developer	COMP-423	p. 49
Developing Java Applications with IBM's Rational Application Developer	COMP-424	p. 48
Java Enterprise Programming with IBM's Rational Application Developer	COMP-425	p. 50

ADVANCED JAVA 2 EE ENTERPRISE SYSTEM DESIGN AND PROGRAMMING CERTIFICATE – 7171

JAVA 2 EE (Java Platform, Enterprise Edition) is the industry standard for developing multi-tier, server-centric enterprise applications. Since its early inception in mid-1990, it has evolved to a very rich set of coordinated technologies by IT powerhouses and Open Source efforts. JAVA 2 EE skills are in high demand. The objective of this program is to teach the latest technologies, tools, frameworks, design pattern and best practices of the industry. The program also provides preparation for IBM Java Certification exams.

COMPLETION REQUIREMENTS

Java Enterprise Programming with IBM's Rational Application Developer	COMP-425	p. 50
J2EE 5 Enterprise Programming with IBM's Rational Application Developer	COMP-426	p. 50
Open Source Java EE Enterprise System Design & Programming	COMP-428	p. 52

MICROSOFT .NET CERTIFICATE – 7030

Microsoft .NET framework is designed to have a competitive advantage over similar products. Market conditions have created a demand for programmers with .NET skills. Potential .NET developers will therefore be interested in courses that provide the necessary skills to take advantage of interesting new opportunities. This certification will provide a significant competitive advantage in a job market where this credential is widely recognized and respected. You will also receive course preparation for Microsoft Certification exams that offer several levels of certification in the .NET development framework including:

- Web Applications
- Windows Applications
- SQL Server 2008

Microsoft Certified Technology Specialist (MCTS) Certification requirements are cumulative as students take more Microsoft exams.

COMPLETION REQUIREMENTS

Introduction to .NET Programming with VB .NET OR Introduction to .NET Programming with C# .NET	CEDN-001	p. 49
Developing Windows Applications with VB.Net or C#	CEDN-004	p. 49
Developing WEB Applications with Visual.Studio.Net	CEDN-002	p. 48
Developing XML WEB Services with Visual.Studio.Net	CEDN-003	p. 48
Database Design & Modeling with Microsoft SQL Server 2008	CEDN-005	p. 48
	CEDN-006	p. 47

myCentennial

For your timetable, grades, unofficial transcripts, tax receipts and other services, check online at myCentennial: <http://my.centennialcollege.ca>.

Experiencing technical problems? Contact helpdesk@centennialcollege.ca or call 416-289-5280.

SOFTWARE QUALITY ASSURANCE AND TESTING (SQAT) CERTIFICATE – 7170

As software becomes more complex, it is necessary to establish processes and clear methodologies. Doing so will ensure that the end-product has been exposed to intensive and rigorous industry-wide testing techniques and procedures. This will translate into a high degree of assurance that a software system passes the test for correctness and reliability. Beginners and those who already have an IT diploma/degree or industry IT professionals seeking formal qualifications would be interested in this certificate. The SQAT certificate consists of six 30-hour courses.

COMPLETION REQUIREMENTS

Must be taken in order shown below:

Introduction to Testing Principles & Methodologies	SQAT-001	p. 50
Writing Testable Requirements	SQAT-002	p. 54
Selecting and Implementing Software Testing Tools	SQAT-003	p. 53
Managing the Testing Process	SQAT-004	p.51
Software Quality Assurance	SQAT-005	p. 53
Software Testing Automation Tools & Best Practices	SQAT-006	p. 53

WEB APPLICATIONS DEVELOPMENT PROGRAMMING CERTIFICATE – 7163

This certificate will provide students with common and current programming approaches to web development, including the use of databases and application server programming. Students using current web technologies will have skills to develop web services, B2C & B2B web applications and other dynamic Net-based programs. Prior knowledge of HTML is required.

COMPLETION REQUIREMENTS

FOUR mandatory courses:

Programming 1 (Introductory Programming Concepts)	COMP-100	p. 52
Introduction to Database Concepts	COMP-122	p. 49
Web Fundamentals	CG-093	
ERP and Business Solutions	CEOA-253	p. 143

Plus THREE of the following elective courses:

Developing Web Applications with Visual Studio.Net	CEDN-003	p. 48
Developing XML Web Services with Visual Studio.Net	CEDN-005	p. 48
Developing Java Applications with IBM's Rational Applications Developer	COMP-424	p. 48
Java Enterprise Programming with IBM's Rational Application Developer	COMP-425	p. 50
UML Modeling with Casetool (offered online ONLY)	CEOA-400	p. 142

Ask your employer!

Did you know that almost one third of our CE students' employers pay some or all of their course costs? And 12% provide time off to take courses?

Ask your employer about support for your professional development!

Database Programmer Analyst/ Administration

CHOICE OF TWO CERTIFICATES

- Oracle Database Associate (7354)
- Oracle Database Administrator Professional (7355)

In an environment of multi-platform databases, Oracle is a powerful and reliable Relational Database Management System (RDBMS) for enterprise-wide integration of systems and applications – designed for experienced professionals who wish to broaden their areas of expertise as well as those who wish to begin new careers. Our programs use curriculum as specified by Oracle Corp., and has a minimum GPA requirement of C+.

In addition to Centennial College Certification in the model of your choice, successful graduates are well-prepared to write the Oracle Certified Professional (OCP) examination.

ORACLE DATABASE ASSOCIATE CERTIFICATE – 7354

The first step toward earning the highly respected Oracle Certified Professional (OCP) status is to earn the Oracle Certified Associate (OCA) credential. Oracle has launched an apprentice skill level for the beginning IT professional, OCA, which provides foundational knowledge with Oracle technologies and credentials for entry-level employment opportunities. OCAs are qualified to be junior IT team members working with database administrators or application developers. The candidate will gain skill and ability through the combined efforts of Oracle hands-on training and on-the-job experience, leading first to the OCA and then the OCP. With each new credential earned, the candidate can expect increased job opportunities, higher pay and career growth.

COMPLETION REQUIREMENTS

Introduction to Database Concepts	COMP-122	p. 49
Introduction to Oracle SQL	COMP-450	p. 50
Oracle Database Administration Fundamentals 1	COMP-451	p. 52

ORACLE DATABASE ADMINISTRATOR PROFESSIONAL CERTIFICATE – 7355

Once the OCA credential is obtained, the candidate can pursue the next level of mastery – the Oracle Certified Professional. Oracle Certified Database Administrators have proven skills deploying and managing enterprise-wide databases. With experience, OCP DBAs are eligible for senior-level responsibilities. The OCP DBA candidate will complete two courses and exams, including those at the Associate level, to demonstrate skills acquisition.

COMPLETION REQUIREMENTS

Introduction to Database Concepts	COMP-122	p. 49
Introduction to Oracle SQL	COMP-450	p. 50
Oracle Database Administration Fundamentals 1	COMP-451	p. 52
Oracle Database Administration Fundamentals 2	COMP-452	p. 52

MICROSOFT SHAREPOINT SPECIALIST CERTIFICATE – 7393

Office SharePoint Server 2007 is tightly integrated with familiar client desktop applications, e-mail, and web browsers to provide a consistent user experience that simplifies how people interact with content, processes, and business data.

In a competitive modern environment, organizations are interested in how to:

- Boost employee productivity by simplifying everyday business activities.
- Effectively manage and repurpose content to increase business value
- Simplify organization-wide access to both structured and unstructured information across disparate systems
- Connect people with information and expertise
- Accelerate shared business processes across organizational boundaries.

Microsoft SharePoint 2007 has provided the mechanisms for many of these solutions and is an attractive option for many organizations. This certificate consists of five 30-hour modules.

COMPLETION REQUIREMENTS

Must be taken in order shown below:

Introduction to SharePoint 2007	SHAR-001	p. 48
Installing & Configuring SharePoint	SHAR-002	p. 48
SharePoint Customization & Deployment	SHAR-003	p. 53
SharePoint MOSS Advanced Features	SHAR-004	p. 53
SharePoint Workflow & InfoPath	SHAR-005	p. 53

Microsoft Office Specialist (MOS)

Microsoft Office Specialist (MOS) certification, the premier Microsoft desktop certification, is a globally recognized standard for demonstrating desktop skills. The Office Specialist program helps meet the demand for qualified and knowledgeable people in the modern workplace. There are three levels of MOS certification:

- Core (Word/Excel)
- Expert (Word/Excel/PowerPoint/Access)
- Master (successfully complete the 4 Expert level examinations)

Centennial offers courses to prepare you to write all three certification exams. The courses are structured to teach students the skills and learning objectives required to meet MOS Certification Standards, however the courses are not designed to prepare you for the exams themselves. Students planning to pursue the program should make use of the texts and online resources labeled as "exam preparatory" in conjunction with the courses, if they plan to take the examinations.

MICROSOFT OFFICE APPLICATION SUPPORT CERTIFICATE – 7046

This certificate of achievement is designed to help you meet the needs in the area of business. Learn the diversity available within the Microsoft Office Professional suite of programs for home and business applications. All of the Microsoft courses listed below have been designed according to the structure and learning outcomes set out by Microsoft.

COMPLETION REQUIREMENTS

Microsoft Word	CEMS-981	p. 51
Microsoft Word – Advanced	CEMS-982	p. 52
Microsoft Excel	CEMS-983	p. 51
Microsoft Excel – Advanced	CEMS-984	p. 51
Microsoft PowerPoint – Comprehensive	CEMS-986	p. 51
Microsoft Access	CEMS-985	p. 51
Microsoft Access – Advanced	CEMS-987	p. 51
Microsoft Office Integration (DL)	CEIL-988	p. 143

CISCO NETWORKING ASSOCIATE CERTIFICATE – 7390

This hands-on certificate program provides the learner with knowledge of networking technology at the associate level. It will help prepare the learner to obtain the Cisco Certified Entry Networking technician (CCENT™) and the Certified Network Associate (CCNA™) industry certification. These courses also provide the groundwork for more advanced studies in networking.

For more information about this program, e-mail the program supervisor at areid@centennialcollege.ca.

COMPLETION REQUIREMENTS

Mandatory Courses:

CCNA 1 Network Fundamentals	CCTC-501	p. 52
CCNA 2 Routing Protocols and Concepts	CCTC-502	p. 46
CCNA 3 LAN Switching and Wireless	CCTC-503	p. 46
CCNA 4 Accessing the WAN	CCTC-504	p. 46

Note: This certificate program does not include the cost of the CCNA™ certification exam.

CISCO NETWORKING PROFESSIONAL CERTIFICATE – 7389

The Cisco Certified Network Professional (CCNP™) designation is one of the most respected industry certifications available for the networking professional. This certificate program helps prepare the learner to obtain this certification by providing an intensive program of study combining theoretical concepts with extensive hands-on exercises. Please note that each course prepares the learner for one of the three exams required to obtain the CCNP designation.

For more information about this program, e-mail the program supervisor at areid@centennialcollege.ca.

COMPLETION REQUIREMENTS

Mandatory Courses:

CCNP 1 Implementing IP Routing	CCTC-505	p. 47
CCNP 2 Implementing IP Switching	CCTC-507	p. 47
CCNP 3 Managing & Troubleshooting IP Networks	CCTC-509	p. 47

Note: This certificate program does not include the cost of the CCNP™ certification exam.

Prerequisites please!

It is your responsibility to ensure program requirements and course prerequisites are met. If you lack appropriate prerequisites (or credit) for a course, you may be asked to withdraw or transfer to a more appropriate course, with the risk of academic/financial penalty. Call 416-289-5207 for more information.

Boot Camps

Looking for a new job or trying to advance in the one you have? Interested in the computer and networking field? Then why not make the most of your summer vacation by obtaining one or two highly valued IT industry certifications? These boot camps provide an intensive, hands-on learning experience and are designed to provide you with the knowledge and skills necessary to obtain the Cisco CCNA and the CompTIA A+ industry certifications. Obtain current, marketable IT skills from industry experts.

- A+ Boot camp
- CCNA Boot camp

NETWORK SPECIALIST POST-GRADUATE CERTIFICATE – 2836

This post-graduate program builds upon an individuals' solid technical foundation and provides many of the advanced networking skills that are in high demand in industry. Computer networks have become the backbone of virtually every organization today, linking personal computers so that they may share information and work together seamlessly. There is a strong demand in every sector of the economy for network professionals who have the expertise to maintain and expand these vital telecommunications networks. Potential job titles in this area include: junior network analysts, network technicians/technologies and installers, as well as positions in technical sales and support to name a few. This program is post-graduate program, and upon completion of this program, students are prepared to design, install, and maintain everything from local area networks (LANs) to company 'intranets' which link to the world wide web. This program provides much of the knowledge necessary to complete many industry recognized certifications including: Cisco CCNP, Managing Cisco Network Security, Cisco Secure PIX Firewall Advanced, Cisco Wireless LAN Support, Certified Wireless Network Administrator.

ADMISSION REQUIREMENTS

1. A three- or four-year diploma or degree (preference will be given to technology-related diplomas and/or degrees), or relevant business experience.
2. Satisfactory results in a communications and logic skills assessment.
3. Demonstrated computer proficiency.
4. A personal interview.

COMPLETION REQUIREMENTS

Networking Fundamentals	NETW-401	p. 52
Introduction to LANs	NETW-402	p. 49
Interconnection LANs	NETW-403	p. 49
Field Placement	NETW-404	p. 48
Wide Area Networking	NETW-405	p. 54
Network Design	NETW-406	p. 52

Microsoft® Certified Systems Engineer (MCSE) & Microsoft® Certified System Administrator (MCSA)

LINUX SYSTEM SPECIALIST CERTIFICATE – 7388

Due to its stability, flexibility, and low TCO, the Linux Operating System has gained enormous momentum in both the home and enterprise markets. This comprehensive certificate will explore the various aspects of the Linux OS and provide the knowledge and skills necessary to design, implement, and manage a Linux solution for both the home and business environment. This certificate program also provides the requisite knowledge for many industry recognized certifications. For more information about this program, e-mail the program supervisor at areid@centennialcollege.ca.

COMPLETION REQUIREMENTS

Linux System Overview	CCTC-404	p. 51
Linux System Administration	CCTC-413	p. 51
Linux Security	CCTC-411	p. 51
Linux Networking Essentials	CCTC-414	p. 50
Linux in the Enterprise Environment	CCTC-416	p. 50
Linux Optimization Techniques	CCTC-417	p. 51

COMPUTER HARDWARE AND NETWORK SUPPORT CERTIFICATE – 7019

This certificate program will prepare you for an entry-level position in the fast-paced area of computer networking. It provides the expertise and hands-on experience necessary to obtain many well recognized industry certifications, such as CCNA, A+ and Network+. It also builds a firm foundation for more advanced studies in this area. For more information about this program, e-mail the program supervisor at areid@centennialcollege.ca.

COMPLETION REQUIREMENTS

Mandatory courses:

A+ Essentials for PC Repair and IT Technician	CCTC-103	p. 45
CCNA 1 Network Fundamentals	CCTC-501	p. 46
CCNA 2 Routing Protocols and Concepts	CCTC-502	p. 46

Plus any two courses from the Cisco (CCTC-503/CCTC-504) or Linux (CCTC-404/CCTC-411/CCTC-413/CCTC-414/CCTC-416/CCTC-417) streams.

WIRELESS TECHNOLOGIES CERTIFICATE – 7680

Wireless is one of the fastest growing of all the current network technologies. It not only provides an extension to the wired world but is often the only technology which can provide access to remote areas or under emergency conditions. Recent technological developments have greatly extended the range and throughput of wireless transmissions, allowing them to be considered as an alternative to wired implementations. This program will provide an overview of the current state of wireless technologies as well as the skills and knowledge necessary to design, install and maintain wireless networks.

COMPLETION REQUIREMENTS

CCNA 1 Network Fundamentals	CCTC-501	p. 46
CCNA 3 LAN Switching and Wireless	CCTC-503	p. 46
Wireless Communications	CETE-941	p. 54
Wireless LANs	CCTC-565	p. 54
Broadband Wireless	CCTC-566	p. 46
Cellular Networks	CCTC-567	p. 47
RF Technology	CCTC-568	p. 52
Capstone Project		p. 46

VOICE OVER INTERNET PROTOCOL (VOIP) CERTIFICATE – 7681

This program is designed for anyone wishing to gain the knowledge and skills necessary to design, install and maintain VoIP systems. Courses are structured to provide entry points for novices as well as those with experience in IP and/or voice networks. This program will examine commercial and open source solutions suitable for individuals as well as businesses of all sizes.

COMPLETION REQUIREMENTS

CCNA 1 Network Fundamentals	CCTC-501	p. 46
CCNA 3 LAN Switching and Wireless	CCTC-503	p. 46
Advanced Voice Communications	CETE-917	p. 45
Voice over IP – An Introduction	CCTC-550	p. 54
Advanced VoIP	CCTC-551	p. 45
Designing and Implementing a VoIP Solution	CCTC-552	p. 48
Building a VoIP Network using Open Source Software and Tools	CCTC-553	p. 46
Capstone Project		p. 46

Counselling at Centennial

Centennial students can get career and personal advice by contacting our Career and Counselling Centre at 416-289-5000, ext. 2627, e-mail: counselling@centennialcollege.ca, website: centennialcollege.ca/counselling.

Security

NETWORK SECURITY ADMINISTRATOR CERTIFICATE – 7263

Computer Security is an increasingly significant concern to businesses and individuals. The risks associated with this technology have escalated with a wide spread use of the Internet, networking, and computers. These 12-hour short security courses are intended to provide you with the knowledge and hands on experience to help mitigate these concerns and how to cope with any issues that may arise. They explore the general principles of network security plus specifics such as firewalls and operating system security. These courses are intended for those in the IT profession who require specific security and network operating skills and training.

COMPLETION REQUIREMENTS

TCP/IP and Other Internet Protocols	CETE-978	p. 53
Introductory Network Security	CETE-208	p. 49
Threats and Attacks	CETE-931	p. 53
Authentication	CETE-934	p. 46
Content Filtering	CETE-938	p. 47
Monitoring and Intrusion Detection	CETE-936	p. 52
Forensics	CETE-929	p. 48

COMPUTER FORENSICS CERTIFICATE – 7464

This program prepares the learner for a career in the fields of data recovery and forensics. The learner is introduced to the tools and procedures used in the field of Computer Forensics as well as the legal concepts of data collection and evidence handling.

Prerequisites: A+ Essentials for PC Repair and IT Technician CCTC-103 and Network Fundamentals CCTC-501

COMPLETION REQUIREMENTS

Fundamentals of Information Security	CETE-895	p. 48
Computer Hacking and Incident Analysis	CETE-898	p. 47
Intrusion Detection and Auditing	CETE-899	p. 50
Data Forensics 1 – Introduction	CETE-896	p. 47
Data Forensics 2 – Advanced	CETE-897	p. 47

UNIX/Linux

UNIX/LINUX SYSTEMS ADMINISTRATION CERTIFICATE – 7325

UNIX is a comprehensive operating system with an amazing number of features and capabilities that support multi-user, multi-tasking and interactive computing environments for individuals and organizations. As the leader in open systems architectures, UNIX is capable of running on anything from PDAs and game consoles to mainframe systems. Our UNIX short courses are designed for those with computing experience who want to learn about the UNIX operating system, as well as those individuals who desire to gain knowledge of Linux for home or business use.

COMPLETION REQUIREMENTS

Introduction to UNIX/Linux	CEMC-971	p. 50
UNIX/Linux Operations for Users	CEUN-902	p. 53
UNIX Shell Scripts	CEUN-932	p. 53
UNIX Systems Administration	CEUN-911	p. 53
UNIX/Linux Security	CEUN-912	p. 53
UNIX/Linux Installation	CEUN-913	p. 53
Working with Linux Graphical User Interfaces	CEUN-951	p. 54

Computers

A+ BOOT CAMP

CCTC-901

This intensive, five-day session covers a broad range of hardware and software technologies, without focus on any particular vendor's products. Students will acquire the skills necessary to take the exams necessary to obtain the A+ Certification.

HOURS: 37.5

FEE: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Spring	841	July 4 – 8	M – F	8:30 am-5:30 pm	PRO

A+ ESSENTIALS FOR PC REPAIR AND IT TECHNICIAN

CCTC-103

The focus of this course is to prepare the student to meet the objectives of two A+ certification exams. The A+ Essentials exam measures computer knowledge for an entry-level IT professional, and the A+ IT Technician exam tests for specific skills for individuals in a technical environment with on-site client interaction. With practical learning, this course gives the student a sound understanding of current PC Hardware and Operating system repair, maintenance and upgrade issues, and prepares the student to write these two A+ exams.

HOURS: 98

FEE: IC: \$895

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 13 – Dec 20	M/W	6:30-10 pm	PRO
Winter	821	Jan 10 – Apr 18	M/W	6:30-10 pm	PRO
Spring	841	May 10 – Aug 11	Tu/Th	6:30-10 pm	PRO

ADVANCED VOICE COMMUNICATIONS

CETE-917

Learn how to design and implement a voice network. The design aspects include an analysis of the features of PBX, Key, Centrex and hybrid systems and the application of traffic studies for network optimization. The design criteria will be backed up with case studies. Implementation includes installation of the network, operation and management.

HOURS: 42

FEE: IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Dec 15	W	7-10 pm	PRO
Winter	821	Jan 12 – Apr 13	W	7-10 pm	PRO

ADVANCED VOIP

CCTC-551

This course is a continuation of VoIP – An Introduction (CCTC-550). It continues the investigation of the new and exciting technology delving deeper into the available protocols and procedures for Implementing a VoIP based system. This course will take a hands-on approach to currently available technology and examine everything from no-cost solutions for personal use through open source solutions to enterprise level solutions.

Prerequisite: Voice Over IP- An Introduction CCTC-550 or permission of the department

HOURS: 42

FEE: IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO

New!

New courses may have been added and other changes made since this publication went to print. Please check our website at centennialcollege.ca/ parttime for the most current information.

AUTHENTICATION

CETE-934

Positive user identification, coupled with access control and audit capabilities provide fine-grained control over access to networks, hosts and individual applications. Review the different technologies used in token authentication schemes, and practical applications found for each. The use of cryptographic authentication techniques is also growing, and this technology is discussed, together with a review of public key infrastructure.

Prerequisite: Completion of Introductory Network Security CETE-208 or equivalent experience in network security

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 16 & 17	Sa/Su	9 am-4 pm	PRO
Winter	821	Feb 12 & 13	Sa/Su	9 am-4 pm	PRO
Spring	841	June 18 & 19	Sa/Su	9 am-4 pm	PRO

BROADBAND WIRELESS

CCTC-566

This course concentrates on the contents of the IEEE 802.16-2004 and 802.16e-2005 standards for broadband wireless access technology. This course is designed for students who are working on WiMAX and 802.16e-based products and services, or expect to be working on those projects soon. Students will gain a fundamental understanding of the 802.16 standards, and the activities of the WiMAX Forum.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO

BUILDING A VOIP NETWORK USING OPEN SOURCE SOFTWARE AND TOOLS

CCTC-553

In this course various open-source software solutions will be examined. The course is designed to provide the knowledge and skills necessary to implement a low-cost VoIP solution for small to medium businesses.

Prerequisite: Advanced VoIP or permission of the department.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 13 – Dec 20	M	7-10 pm	PRO
Winter	821	Jan 10 – Apr 18	M	7-10 pm	PRO

CAPSTONE PROJECT

This course will utilize all of the knowledge and skills gained in previous courses to develop and present a technical solution for a real-world problem. Students will work as part of a multi-disciplinary team and will be responsible for managing the entire project to produce a technical solution that is acceptable to the client.

For more information, contact Allan Reid at 416-289-5000, ext. 8214 or e-mail areid@centennialcollege.ca.

CCNA 1 NETWORK FUNDAMENTALS

CCTC-501

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and role of protocols and services at the application, network, data link, and physical layers. The principles and structure of the IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation of the curriculum. Labs use a “model internet” to allow students to analyze real data without affecting production networks. Packet Tracer (PT) activities help students analyze protocol and network operation and build small networks in a simulated environment.

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 21	Tu	7-10 pm	PRO
Winter	821	Jan 12 – Apr 20	W	7-10 pm	PRO
Spring	841	May 11 – Aug 17	W	7-10 pm	PRO

CCNA 2 ROUTING PROTOCOLS AND CONCEPTS

CCTC-502

This course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. Packet Tracer activities reinforce new concepts, and allow students to model and analyze routing processes that may be difficult to visualize or understand.

Prerequisites: Network Fundamentals CCTC-501

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 16 – Dec 23	Th	7-10 pm	PRO
Winter	821	Jan. 11 – April 19	Tu	7-10 pm	PRO
Spring	841	May 12 – Aug 18	Th	7-10 pm	PRO

CCNA 3 LAN SWITCHING AND WIRELESS

CCTC-503

This course provides a comprehensive, theoretical, and practical approach to learning the technologies and protocols needed to design and implement a converged switched network. Students learn about the hierarchical network design model and how to select devices for each layer. The course explains how to configure a switch for basic functionality and how to implement Virtual LAN’s, VTP, and Inter-VLAN routing in a converged network.

Prerequisites: Network Fundamentals CCTC-501

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Dec 22	W	7-10 pm	PRO
Winter	821	Jan 13 – Apr 21	Th	7-10 pm	PRO
Spring	841	May 10 – Aug 16	Tu	7-10 pm	PRO

CCNA 4 ACCESSING THE WAN

CCTC-504

This course discusses WAN technologies and network services required by converged applications in enterprise networks. The course uses the Cisco Network Architecture to introduce integrated network services and explains how to select the appropriate devices and technologies to meet network requirements. Students learn how to implement and configure common data link protocols and how to apply WAN security concepts, principles of traffic, access control, and addressing services. Finally, students learn how to detect, troubleshoot, and correct common enterprise network implementation issues.

Prerequisites: Network Fundamentals CCTC-501, Routing Protocols and Concepts CCTC-502, and LAN Switching and Wireless CCTC-503

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 21	Tu	7-10 pm	PRO
	821	Jan 12 – Apr 20	W	7-10 pm	PRO
Spring	841	May 11 – Aug 17	W	7-10 pm	PRO

CCNA BOOT CAMP

CCTC-902

The CCNA Boot Camp is an intensive, 10-day instructor-led program, designed to help you achieve your Cisco CCNA certification. It includes extensive hands-on labs where you will learn how to install, configure, operate, and troubleshoot medium-sized routed and switched networks. This boot camp will also introduce the basics of wireless networking as well as techniques for the mitigation of security threats. Students will have 24-hour per day access to online equipment during the boot camp to practice their skills.

HOURS: 75 **FEE:** IC: \$995

TERM	SEC. #	DATE	DAY	TIME	LOC
Spring	841	July 11 – 22	M – F	8:30 am-5:30 pm	PRO

CCNA SECURITY NEW

CCTC-517

The Cisco Certified Network Associate Security (CCNA® Security) validates that an Individual has the skills required to develop a security infrastructure as well as to recognize and mitigate threats to, and vulnerabilities in networks. The CCNA Security curriculum emphasizes core security technologies, the installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices, and competency in the technologies that Cisco uses in its security structure.

Prerequisite: CCNA level knowledge of networking

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 10 – Apr 25	M	7-10 pm	PRO

What’s new?

Visit centennialcollege.ca/parttime throughout the year for news and course updates.

CCNP 1 IMPLEMENTING IP ROUTING

CCTC- 505

This course teaches students how to implement, monitor, and maintain routing services in an enterprise network. Students will learn how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions, using a range of routing protocols in IPv4 and IPv6 environments. The course also covers the configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.

Prerequisites: Completion of CCNA 1 to 4 or hold a current CCNA certification.

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 18 – Oct 30	Sa	9 am-5 pm	PRO
Winter	821	Jan 15 – Feb 26	Sa	9 am-5 pm	PRO

CCNP 2 IMPLEMENTING IP SWITCHING

CCTC -507

This course teaches students how to implement, monitor, and maintain switching in converged enterprise campus networks. Students will learn how to plan, configure, and verify the implementation of complex enterprise switching solutions. The course also covers the secure integration of VLANs, WLANs, voice, and video into campus networks. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.

Prerequisites: Completion of CCNA 1 to 4 or hold a current CCNA certification.

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 19 – Oct 31	Su	9 am-5 pm	PRO
Winter	821	Jan 16 – Feb 27	Su	9 am-5 pm	PRO

CCNP 3 MAINTAINING AND TROUBLESHOOTING IP NETWORKS

CCTC-509

This course teaches students how to monitor and maintain complex, enterprise routed and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, in a systematic and ITIL-compliant approach. Extensive labs emphasize hands-on learning and practice to reinforce troubleshooting techniques

Prerequisites: CCTC-505 and CCTC-507

HOURS: 45 **FEE:** IC: \$495

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 6 – Dec 18	Sa	9 am-5 pm	PRO
Winter	821	Mar 5 – Apr 16	Sa	9 am-5 pm	PRO

CELLULAR NETWORKS

CCTC-567

This course provides a thorough understanding of cellular networks which are one of the fastest growing segment of the wireless industry. Fundamentals of cellular networks, cellular topology, networking planning and capacity expansion techniques, mobility management, radio resource and power management are studied. Students will gain an insight into the various cellular standards used in the world.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 15 – Apr. 16	Sa	9 am-noon	PRO

Programs that fit your schedule

Our CE courses are delivered in multiple formats – in-class, online and print-based! Choose the one that best suits your schedule.

COMPUTER HACKING AND INCIDENT ANALYSIS

CETE-898

This course provides the basic knowledge necessary to understand the techniques of computer hacking and how to respond to hacking related incidents. The focus of this course is to prepare the student to be able to respond to Zero-day exploits where vendor services such as virus scanning and intrusion detection are rendered useless. The course will cover the origin and history of hacking examining in detail the techniques used by early hackers. The course will then shift to today's vulnerabilities and concerns in an attempt to predict and prepare the student for tomorrow's exploits.

Prerequisite: Fundamentals of Information Security CETE-895

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 6 – Dec 18	Sa	9 am-4 pm	PRO

CONTENT FILTERING

CETE-938

Understand the increasingly important requirement of controlling the data content of network traffic, and the management of available bandwidth. The dangers of uncontrolled access to network resources are discussed, together with the associated social and legal implications. Through a series of hands-on exercises you will explore creating and bypassing filters, which are intended to block active content from web pages and e-mail.

Prerequisite: Completion of Introductory Network Security CETE-208 or equivalent experience in Network Security and TCP/IP

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 23 & 24	Sa/Su	9 am-4 pm	PRO
Winter	821	Feb 26 & 27	Sa/Su	9 am-4 pm	PRO
Spring	841	June 25 & 26	Sa/Su	9 am-4 pm	PRO

DATA FORENSICS 2 – ADVANCED

CETE-897

This course provides information on advanced computer forensics and how to prepare for and conduct a computer investigation. It includes the use of computer forensics software and hardware to recover forensic data from PCs and handheld devices such as PDAs, pagers, and cell phones. Analysis of the Windows XP operating system and forensic analysis of Microsoft Vista will also be introduced. Hands-on exercises are an integral part of the course.

Prerequisites: Data Forensics 1 – Introduction CETE-896

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Spring	841	May 28 – July 9	Sa	9 am-4 pm	PRO

DATA FORENSICS 1 – INTRODUCTION

CETE-896

This course provides information on identifying inappropriate uses of corporate IT, gathering electronic evidence of wrongdoing, securing corporate systems from further misuse, and protecting electronic evidence from intentional or accidental modification. Hands-on exercises are an integral part of the course.

Prerequisites: Intrusion Detection and Auditing CETE-899

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	841	Mar 5 – April 16	Sa	9 am-4 pm	PRO

DATABASE DESIGN & MODELING WITH MICROSOFT SQL SERVER 2008

CEDN-006

This course serves as preparation for Microsoft Exam 70-229: Designing and Implementing Databases with Microsoft SQL Server 2008 Enterprise Edition, which is one of several electives for the MCSE certification track, and a core requirement for MCDBA certification. Topics covered include developing a logical data model, implementing the database and objects, retrieving and modifying data using Transact-SQL, using indexes and views, programming business logic (stored procedures, triggers), tuning and optimizing data access, and creating and maintaining database security.

Prerequisite: Introduction to Database Concepts COMP 122 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$370

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 18 – Apr 19	Tu	7-10 pm	PRO
Spring	841	May 10 – Aug 9	Tu	7-10 pm	PRO

DESIGNING AND IMPLEMENTING A VOIP SOLUTION CCT-552

This course continues to examine the design and implementation of a VoIP solution using both commercial and open-source solutions. It considers such issues as QoS, mobility, wireless and security, and how they relate to a VoIP solution. Students will work in groups to design a solution for a business environment and create an implementation strategy for their design.

Prerequisite: Advanced VoIP CCTC-501 or permission of the department

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Dec 15	W	7-10 pm	PRO

DEVELOPING JAVA APPLICATIONS WITH IBM'S RATIONAL APPLICATION DEVELOPER COMP-424

Building on fundamentals of Java programming language, this course covers database backed Web Application Development utilizing the most popular technologies such as Servlet, JSP, Tablib, Database Connectivity (JDBC) and Security Control (JAAS) using Java EE. Learn how to create complex real Web applications with Java programming language in industrial standard platforms and tools.

Prerequisites: Introduction to Java Programming using IBM's Rational Application Developer COMP-423 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$385

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Dec 15	W	7-10 pm	PRO
Winter	821	Jan 12 – Apr 13	W	7-10 pm	PRO
Spring	841	May 11 – Aug 10	W	7-10 pm	PRO

DEVELOPING WEB APPLICATIONS WITH VISUAL STUDIO.NET CEDN-003

Build real-world programming skills and prepare for .Net Certification Exams. Learn how to build Web applications using Visual Basic .NET/C#. Then extend your expertise through additional skill-building exercises. As you gain practical experience with essential Web development tasks, you're also preparing for Microsoft .Net Certification.

Prerequisites: Introduction to .Net Programming with VB.Net CEDN-001 or Introduction to .NET Programming with C# CEDN-004 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$370

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 13 – Dec 13	M	7-10 pm	PRO
Winter	821	Jan 10 – Apr 18	M	7-10 pm	PRO
Spring	841	May 9 – Aug 22	M	7-10 pm	PRO

DEVELOPING WINDOWS APPLICATIONS WITH VB.NET CEDN-002

Build real-world programming skills and prepare for .NET Certification exams. Learn how to build Windows-based applications using Visual Basic .NET/C#. Then extend your expertise through additional skill-building exercises. As you gain practical experience with essential Windows development tasks, you're also preparing for Microsoft .NET certification.

Prerequisite: Introduction to .Net Programming with VB.NET CEDN-001 or Introduction to .NET Programming With C# CEDN-004 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$370

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Dec 15	W	7-10 pm	PRO
Winter	821	Jan 12 – Apr 13	W	7-10 pm	PRO
Spring	841	May 11 – Aug 10	W	7-10 pm	PRO

DEVELOPING XML WEB SERVICES WITH VISUAL STUDIO.NET CEDN-005

The goal of this course is to provide you with the knowledge and skills required to develop Web Services-based solutions to solve common problems in the distributed application domain. The course will cover Microsoft Visual Studio.NET, C# .NET/VB.NET, Microsoft ASP.NET, and Universal Description, Discovery, and Integration (UDDI) to enable you to build, deploy, locate, and consume Extensible Markup Language (XML) Web Services. This course provides preparation for the .NET certification exams.

Prerequisite: Developing Web Applications with VB.Net CEDN-003 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$370

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 16 – Dec 16	Th	7-10 pm	PRO
Winter	821	Jan 13 – Apr 14	Th	7-10 pm	PRO
Spring	841	May 12 – Aug 11	Th	7-10 pm	PRO

FIELD PLACEMENT NETW-404

During this four-week period, students are placed in the networking department of an organization, where they are assigned to a member of the networking team. They begin by "shadowing" their mentor. As time progresses they can become useful members of the team and can assist in ongoing projects. Field placement is an unpaid position. The idea of field placement is to expose the students to as much networking technology as possible.

Contact Allan Reid at areid@centennialcollege.ca for further information.

FORENSICS CETE-929

Forensics is a rapidly growing branch of network security. As part of the war on terrorism, organized crime, and corporate corruption, forensics auditors are increasingly called upon to preserve and examine evidence, to reconstruct a chain of events, and to recover data which intruders and white collar criminals attempted to destroy or obfuscate. The methods used in forensics may also be abused to gain unauthorized access to personal information. Learn how to use forensics to investigate corporate security incidents and to increase your personal privacy.

Prerequisites: This is an advanced course and requires completion of security courses: Threats and Attacks CETE-931, Monitoring and Intrusion Detection CETE-936, Content Filtering CETE-938 or equivalent experience.

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 6 & 7	Sa/Su	9 am- 4 pm	PRO
Winter	821	Mar 12 & 13	Sa/Su	9 am- 4 pm	PRO
Spring	841	July 16 & 17	Sa/Su	9 am- 4 pm	PRO

FUNDAMENTALS OF INFORMATION SECURITY CETE-895

This course introduces the fundamental concepts in the field of Information Security. It takes a vendor neutral approach to information security and provides a solid foundation upon which other courses can build. This course addresses many of the information domains contained in the Certified Information Systems Security Professional (CISSP) certification.

Prerequisites: CCTC-103 and CCTC-501 or equivalent experience

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 18 – Oct 30	Sa	9 am- 4 pm	PRO

INTRODUCTION TO SHAREPOINT SHAR-001

This course covers the basic MOSS features and will focus on the core features and functionality included in SharePoint 2007, how to use these features, and how to plan and design for them.

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 19 – Oct 24	Su	9 am-3 pm	MOR
Winter	821	Jan 16 – Feb 20	Su	9 am-3 pm	MOR
Spring	841	May 15 – June 19	Su	9 am-3 pm	MOR

INSTALLING & CONFIGURING SHAREPOINT SHAR-002

This course prepares IT professionals to install, configure, administrate, and design a Microsoft SharePoint 2007 environment. It serves as an introduction to both Windows SharePoint Services v3 (WSS) and Microsoft Office SharePoint Server 2007 Standard and Enterprise (MOSS).

Prerequisite: Introduction to SharePoint 2007 SHAR-001

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 7 – Dec 12	Su	9 am-3 pm	MOR
Winter	821	Mar 6 – Apr 17	Su	9 am- 3 pm	MOR
Spring	841	July 10 – Aug 14	Su	9 am- 3 pm	MOR

INTRODUCTION TO LANS

NETW-402

In this course the students will become completely familiar with the hardware and operating software of Cisco routers and switches. Students will add to their knowledge of TCP/IP and IP addressing in this section and gain a familiarity with the ports and protocols in the TCP/IP suite. Hands-on labs will allow the students to develop the skills necessary for interconnecting local and remote networks. This course provides the knowledge necessary to install, configure and troubleshoot basic routed and switched network configurations. It covers theory and IOS commands necessary for partial completion of the Cisco CCNA certification. Detailed content is continually updated to match the requirements of this certification.

Prerequisite: Networking Fundamentals NETW-401

Contact Allan Reid at areid@centennialcollege.ca for further information.

MICROCOMPUTER APPLICATIONS SOFTWARE 2

COMP-126

This course covers intermediate features and capabilities of Excel spreadsheet and the introduction level of Access. The Excel portion covers the use of formulas and functions, preparing graphs, creating what-if and look-up tables. Database topics include the creation of tables, relationships in tables, searching and filtering data, creating queries and reports.

Prerequisite: Microcomputer Applications Software 1 COMP-106

HOURS: 58 **FEE:** IC: \$ 376.95

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 12 – Oct 24	Su	9 am-4 pm	PRO
	802	Sept 16 – Dec 16	Th	7-10 pm	PRO
	803	Sept 19 – Dec 19	Su	10 am-1 pm	PRO
	804	Nov 7 – Dec 19	Su	9 am-4 pm	PRO
Winter	821	Jan 16 – Feb 27	Su	9 am-4 pm	PRO
	822	Jan 20 – Apr 21	Th	7-10 pm	PRO
	823	Jan 23 – Apr 24	Su	10 am-1 pm	PRO
	824	Mar 13 – Apr 24	Su	9 am-4 pm	PRO
Spring	841	May 8 – June 19	Su	9 am-4 pm	PRO
	842	May 12 – Aug 11	Th	7-10 pm	PRO
	843	July 10 – Aug 21	Su	9 am-4 pm	PRO

INTERCONNECTION LANS

NETW-403

In this course the students will become completely familiar with the hardware and operating software of Cisco routers and switches. Students will add to their knowledge of TCP/IP and IP addressing in this section and gain a familiarity with the ports and protocols in the TCP/IP suite. Hands-on labs will allow the students to develop the skills necessary for interconnecting local and remote networks. This course provides the knowledge necessary to install, configure and troubleshoot basic routed and switched network configurations. It covers theory and IOS commands necessary for partial completion of the Cisco CCNA certification. Detailed content is continually updated to match the requirements of this certification.

Contact Allan Reid at areid@centennialcollege.ca for further information.

INTRODUCTORY NETWORK SECURITY

CETE-208

Explore the issues involved in planning, implementing and maintaining network security policies. Discuss the risks and benefits of different security strategies and acceptable use policies. Develop a functional network security policy.

Prerequisite: Completion of TCP/IP and Other Internet Protocols CETE-978 or equivalent experience with TCP/IP

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 25 & 26	Sa/Su	9 am-4 pm	PRO
Winter	821	Jan 29 & 30	Sa/Su	9 am-4 pm	PRO
Spring	841	June 4 & 5	Sa/Su	9 am-4 pm	PRO

INTRODUCTION TO .NET PROGRAMMING WITH C#

CEDN-004

This course provides a systematic introduction to C#, one of Microsoft's new languages supporting its .NET environment. It is intended for programmers who want to leverage their existing skills by learning how to develop .NET applications using a modern object oriented language with C++/Java-like syntax. The course will cover core topics including strings, arrays, objects and inheritance, the .NET framework, GUI interfaces, exceptions, and database access. Microsoft's Visual Studio.NET will be used for the classroom development environment.

Prerequisite: Knowledge of any programming language, Introductory Programming COMP-100

HOURS: 42 **FEE:** IC: \$370

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO
Spring	841	May 10 – Aug 9	Tu	7-10 pm	PRO

INTRODUCTION TO .NET PROGRAMMING WITH VB.NET

CEDN-001

VB.NET is the latest version of the most widely used programming environment in the world, popular with professional developers and beginners alike. This course will teach you how to program in VB.NET from first principles. You'll quickly and easily learn how to write VB.NET code and create attractive windows and forms for the users of your applications. To get you started on the road to professional development, you'll also learn about object-oriented programming, creating your own controls, working with databases, creating menus, and working with graphics.

Recommended: Knowledge of any programming language, Introductory Programming COMP-100

HOURS: 42 **FEE:** IC: \$370

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 13 – Dec 20	M	7-10 pm	PRO
Winter	821	Jan 10 – Apr 18	M	7-10 pm	PRO
Spring	841	May 9 – Aug 22	M	7-10 pm	PRO

INTRODUCTION TO DATABASE CONCEPTS

COMP-122

This course is intended to introduce students to business databases systems, with an introduction to personal, client server and enterprise databases and database concepts. Learning topics will be reinforced using tools such as Oracle and Access. The course will include items such as table and field structure, table relationships and data access queries, as well as an introduction to SQL.

HOURS: 58 **FEE:** IC: \$376.95

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO
Spring	841	May 10 – Aug 9	Tu	7-10 pm	PRO

INTRODUCTION TO JAVA PROGRAMMING USING IBM'S RATIONAL APPLICATION DEVELOPER

COMP-423

This course introduces the Java programming language. Students will learn Java fundamentals and object-oriented programming in Java. Learn how to use Rational Application Developer to create, test, and debug Java Applets and Applications.

Recommended: Some programming background

HOURS: 42 **FEE:** \$385

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO
Spring	841	May 10 – Aug 9	Tu	7-10 pm	PRO

Can't find what you want?

Check the index at the start of each section, search online (centennialcollege.ca/parttime), call us at 416-289-5207 or e-mail ce@centennialcollege.ca

MICROCOMPUTER APPLICATIONS SOFTWARE 1 COMP-106

Recommended for accounting, computer studies, marketing, management studies, office information administration and production students. This introductory course emphasizes computer concepts, internet and e-mail skills, and software packages that enhance effective business communications, such as Microsoft Word and PowerPoint.

HOURS: 58 **FEE:** IC: \$376.95

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 12 – Oct 24	Su	9 am-4 pm	PRO
	802	Sept 16 – Dec 16	Th	7-10 pm	PRO
	803	Sept 19 – Dec 19	Su	10 am-1 pm	PRO
	804	Nov 7 – Dec 19	Su	9 am-4 pm	PRO
Winter	821	Jan 16 – Feb 27	Su	9 am-4 pm	PRO
	822	Jan 20 – Apr 21	Th	7-10 pm	PRO
	823	Jan 23 – Apr 24	Su	10 am-1 pm	PRO
Spring	824	Mar 13 – Apr 24	Su	9 am-4 pm	PRO
	841	May 8 – June 19	Su	9 am-4 pm	PRO
	842	May 12 – Aug 11	Th	7-10 pm	PRO
	843	July 10 – Aug 21	Su	9 am-4 pm	PRO

INTRODUCTION TO ORACLE SQL COMP-450

This course offers you an extensive introduction to data server technology. The class covers the concepts of both relational and object relational databases and the powerful SQL programming language. You are taught to create and maintain database objects and to store, retrieve, and manipulate data. Learn to retrieve data by using advanced techniques such as ROLLUP, CUBE, set operators, and hierarchical retrieval. Learn also to write SQL and SQL*Plus script files using the iSQL*Plus tool to generate report-like output. Demonstrations and hands-on practice reinforce the fundamental concepts.

Recommended: Introduction to Database Concepts COMP-122

HOURS: 42 **FEE:** IC: \$595 (inc Oracle Kit)

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 12 – Oct 24	Su	9 am-4 pm	PRO
Winter	821	Jan 16 – Feb 27	Su	9 am-4 pm	PRO
Spring	841	May 8 – June 19	Su	9 am-4 pm	PRO

INTRODUCTION TO TESTING PRINCIPLES & METHODOLOGIES SQAT-001

Course content includes: test planning – structured and object-oriented software testing techniques and strategies; test execution, environments and case design; inspection techniques – verification and validation techniques; software project metrics – metrics and how to use them.

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 25 – Oct 30	S	9 am-3 pm	MOR
Winter	821	Jan 22 – Feb 26	S	9 am-3 pm	MOR
Spring	841	May 14 – June 18	S	9 am-3 pm	MOR

INTRODUCTION TO UNIX/LINUX CEMC-971

This course provides a hands-on introduction to UNIX. Examine what UNIX is and why UNIX has been an important part of corporate computing and the Internet for more than a quarter century. Learn to manipulate files and navigate the file system. Explore UNIX desktop environments. Customize user accounts and login shells. Compare the standard UNIX shells and construct simple shell scripts. Learn how different UNIX variants and Linux distributions relate to each other.

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 18 & 19	Sa/Su	9 am- 4 pm	PRO
Winter	821	Jan 22 & 23	Sa/Su	9 am- 4 pm	PRO
Spring	841	May 28 & 29	Sa/Su	9 am- 4 pm	PRO

INTRUSION DETECTION AND AUDITING CETE-899

This course is the study of network and system intrusion detection and auditing. An Intrusion Detection System (IDS) utilizes a complex process of determining when a network transmission contains malicious content. The course will begin by reviewing the principles of the Transmission Control Protocol (TCP) and the Internet Protocol (IP). With a solid foundation based on these principles, the student will learn how to defend against network attacks. The student will learn the techniques of creating exploit signature code to thwart zero-day attacks. The course will provide the student with the knowledge necessary to design, implement, and maintain an enterprise scale Distributed Intrusion Detection System.

Prerequisites: Computer Hacking & Incident Analysis CETE-898

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 15 – Feb 26	Sa	9 am-4 pm	PRO

J2EE 5 ENTERPRISE PROGRAMMING WITH IBM'S RATIONAL APPLICATION DEVELOPER COMP-426

This course focuses on the latest Java EE 5 specifications; JDK 5, JSP, JSF, JMS, JMB, EJB 3.0, Persistent API, Web Services and Enterprise Messaging techniques. You are going to learn the concept, design and programming techniques utilizing the Java EE 5 new features.

Prerequisite: Java Enterprise Programming with IBM's Rational Application Developer COMP-425 or equivalent knowledge/experience.

HOURS: 42 **FEE:** IC: \$385

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 16 – Dec 16	Th	7-10 pm	PRO
Winter	821	Jan 13 – Apr 14	Th	7-10 pm	PRO
Spring	841	May 12 – Aug 11	Th	7-10 pm	PRO

JAVA ENTERPRISE PROGRAMMING WITH IBM'S RATIONAL APPLICATION DEVELOPER COMP-425

This course exposes learners to the design and development of enterprise level programming; it typically involves multi-tiers, sync and/or async, lost and/or strong coupled system components in a multi-uses, multi-threaded paradigm. Explore the details of advance J2EE APIs such as Java Server Faces, Entity Beans, XML, JMS and Web Services. Learn how to design and build a complex business application from use cases.

Prerequisites: Developing Java Applications with IBM's Rational Application Developer COMP-424 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$385

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Dec 15	W	7-10 pm	PRO
Winter	821	Jan 12 – Apr 13	W	7-10 pm	PRO
Spring	841	May 11 – Aug 10	W	7-10 pm	PRO

LINUX IN THE ENTERPRISE ENVIROMENT CCTC-416

Having shed its former image as a hobbyist OS, Linux is now considered by most vendors to be a serious competitor to many commercial OS'. This course will concentrate on the incorporation of Linux into the enterprise environment and provide the skills and knowledge required to allow Linux to work seamlessly with other operating systems. Insight will be gained in migrating Proprietary-OS' based networks to Linux, migrating custom application software to Linux, the case for open-standards and open-source, and more.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 13 – Apr 14	Th	7-10 pm	PRO

LINUX NETWORKING ESSENTIALS CCTC-414

Linux is a multi-user, network operating system that exhibits enormous flexibility and stability. This course will explore Linux from a networking perspective examining such topics as: setting up and optimizing web, e-mail, FTP and proxy servers; configuring and maintaining DNS and firewalls; configuration and troubleshooting of routing protocols; interoperability with other operating systems; and troubleshooting TCP/IP issues.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 16 – Dec 16	Th	7-10 pm	PRO

LINUX OPTIMIZATION TECHNIQUES

CCTC-417

Already considered by many to be the epitome of optimization, Linux can be manipulated even further through the use of the techniques discussed in this course. Application specific performance issues will be addressed, as will topics such as advanced compiler optimizations, and environmental adjustments.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 12 – Apr 13	W	7-10 pm	PRO

LINUX SECURITY

CCTC-411

This course will not only investigate how to protect a Linux-based PC or server, but will also examine how Linux can be used to help protect an entire network infrastructure. In this dual honed approach, you will be exposed to GNU/Linux tools such as antivirus and firewall software, intrusion detection systems, and more. Additionally, OS-neutral security concepts such as honeypots will also be discussed.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO

LINUX SYSTEM ADMINISTRATION

CCTC-413

Building on the skills acquired in Linux Systems Overview CCTC-404, this course continues your journey into the world of Linux System Administration. You will gain the experience necessary to customize popular Linux server packages including Samba, Squid, VS-FTP, BIND, and others.

Prerequisite: Linux System Overview, CCTC-404

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 17 – Apr 25	M	7-10 pm	PRO

LINUX SYSTEM OVERVIEW

CCTC-404

Linux is a free Unix-like operating system that has great technical merit and stability. It is now recognized as a serious competitor for Microsoft Windows in both the enterprise and home markets. Learn how to acquire, set up and configure Linux in both the single user and network modes. You will explore some of the more popular commands, learn how to install DHCP and TCP/IP, create group/user accounts and set permissions. You will also have the opportunity to install and configure the system for e-mail, FTP, telnet, and as a web server.

Recommended: A basic familiarity with microcomputers

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO

MANAGING THE TESTING PROCESS

SQAT-004

This course covers the tools needed to succeed as test managers. Topics covered include important techniques, critical testing processes, fundamental management skills, the contextual issues of test projects, such as the economics of testing, the test effort within the project, hardware resource management, the test lab, and what tests managers should know about testing hardware components.

Prerequisite: Selecting and Implementing Software Testing Tools SQAT-003 or equivalent knowledge/experience

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Mar 5 – Apr 9	Sat	9 am-3 pm	MOR
Spring	841	July 9 – Aug 13	Sat	9 am-3 pm	MOR

MICROSOFT ACCESS

CEMS-985

Learn to use Microsoft Access, a powerful database package. This program allows you to manipulate and query your data to customize reports that you need.

Creating, editing and printing as well as querying and linking of databases will be covered.

Prerequisite: Familiarity with Windows

Software Requirement: Online course – MS Access 2000 or higher

HOURS: 30 **FEE:** IC: \$265

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 15 – Oct 27	W	7-10 pm	PRO
Winter	821	Jan 13 – Feb 24	Th	7-10 pm	PRO
Spring	841	May 10 – June 21	Tu	7-10 pm	PRO

MICROSOFT ACCESS – ADVANCED

CEMS-987

Using a preset table of information, the instructor will guide you in training yourself to use Access to produce professional customized database systems and management concepts. Macros and the advantages of the wizards supported by Access will be covered in depth.

Prerequisite: Microsoft Access CEMS-985

Software Requirement: Online course – MS Access 2000 or higher

HOURS: 30 **FEE:** IC: \$265

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 3 – Dec 15	W	7-10 pm	PRO
Winter	821	Mar 3 – Apr 14	Th	7-10 pm	PRO
Spring	841	June 28 – Aug 9	Tu	7-10 pm	PRO

MICROSOFT APPLICATIONS WITH VBA

COMP-470

VBA is used for hundreds of software applications. Learn how to leverage your understanding of your desktop software by creating custom tools to expand the accuracy and productivity of common applications such as Word, Excel and Access.

Prerequisites: Introductory Programming COMP-100 and COMP-126 Microcomputer Applications Software 2 or equivalent experience.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO

MICROSOFT EXCEL

CEMS-983

Learn to use Microsoft Excel – a powerful spreadsheet program that allows you to manipulate and query your data to customize your reports. Creating, editing and printing, as well as charting, will be covered.

Prerequisite: Familiarity with Windows

Software Requirement: Online course – MS Excel 2000 or higher

HOURS: 30 **FEE:** IC: \$265

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 13 – Nov 1	M	7-10 pm	PRO
Winter	821	Jan 11 – Feb 22	Tu	7-10 pm	PRO
Spring	841	May 12 – June 23	Th	7-10 pm	PRO

MICROSOFT EXCEL – ADVANCED

CEMS-984

Learn the advanced features of Excel to produce professional customized workbooks and management concepts. Macros and the advantages of the Wizards supported within Excel will be covered in depth.

Prerequisite: Microsoft Excel CEMS-983 or equivalent knowledge/Experience

HOURS: 30 **FEE:** IC: \$265

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 8 – Dec 20	M	7-10 pm	PRO
Winter	821	Mar 1 – Apr 12	Tu	7-10 pm	PRO
Spring	841	June 30 – Aug 11	Th	7-10 pm	PRO

MICROSOFT POWERPOINT – COMPREHENSIVE

CEMS-986

Learn to use Microsoft PowerPoint – the powerful presentation package. This course will teach the skill set required to enable the student to write the Microsoft PowerPoint Comprehensive certification exam.

HOURS: 30 **FEE:** IC: \$265

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 12 – Oct 24	Su	10 am-1 pm	PRO
Winter	821	Jan 16 – Feb 27	Su	10 am-1 pm	PRO
Spring	841	May 15 – June 26	Su	10 am-1 pm	PRO

MICROSOFT WORD

CEMS-981

Learn to use MS Word, a terrific word processing package that has the convenience of pull-down menus. Learn to create, edit, format and print documents. Use paragraph, page and character formatting commands. Create multiple page documents with tables, and desktop publishing with MS-Word.

Prerequisite: Familiarity with Windows

Software Requirement: Online course – MS Word 2000 or higher.

HOURS: 30 **FEE:** IC: \$265

TERM	TERM	SEC. #	DATE	DAY	TIME
Fall	801		Sept 14 – Oct 26	Tu	7-10 pm
Winter	821		Jan 12 – Feb 23	W	7-10 pm
Spring	841		May 11 – June 22	W	7-10 pm

MICROSOFT WORD – ADVANCED

CEMS-982

Learn the advanced features of Word to produce professionally customized documentation. Macros and advantages of the Wizards and templates supported within Word will be covered in depth.

Prerequisite: Microsoft Word CEMS-981 or equivalent knowledge/experience

Software Requirement: Online course – MS Word 2000 or higher

HOURS: 30 **FEE:** IC: \$265

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 9 – Dec 21	Tu	7-10 pm	PRO
Winter	821	Mar 2 – Apr 13	W	7-10 pm	PRO
Spring	841	June 29 – Aug 10	W	7-10 pm	PRO

MONITORING AND INTRUSION DETECTION

CETE-936

This hands-on course will be of interest to security administrators responsible for monitoring compliance with security and acceptable use policies. Through a series of exercises you will learn to use freely available tools that provide mechanisms for network monitoring and intrusion detection.

Prerequisite: Completion of Threats and Attacks CETE-931 or equivalent experience in network security

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 30 & 31	Sa/Su	9 am-4 pm	PRO
Winter	821	Mar 5 & 6	Sa/Su	9 am-4 pm	PRO
Spring	841	July 9 & 10	Sa/Su	9 am-4 pm	PRO

NETWORK DESIGN

NETW-406

Students utilize all of the knowledge learned in the previous courses to respond to an RFP. Each case describes a company with existing networks that will not meet their needs for the future. The students must design a new network, or upgrade the existing one, taking into account factors such as legacy equipment, budget, new technology, company growth etc. Alternatively students may investigate new technologies as a solution to a current corporate problem. In either case the study will be accomplished in groups and will include a formal written report and PowerPoint presentation.

Contact Allan Reid at areid@centennialcollege.ca for further information.

NETWORKING FUNDAMENTALS

NETW-401

In this introductory course, students will learn the basics of PC hardware, operating systems, networking terminology and theory. Major topics include: PC Hardware, Operating Systems, Installation, Analog/digital, Modulation/Bandwidth/Multiplexing, TCP/IP, IP Addressing, LANs and more. Material presented in the hardware portion of this course will conform to the requirements of the Computer Technology Industry Association's (compTIA) A+ certification. The networking component forms part of the requirements for the Cisco CCNA and compTIA's Network + certifications. Detailed content is continually updated to match the requirements of these Certifications.

Contact Allan Reid at areid@centennialcollege.ca for further information.

OPEN SOURCE JAVA EE ENTERPRISE SYSTEM DESIGN AND PROGRAMMING

COMP-428

Open source frameworks are becoming very popular and well accepted as building blocks for Java EE Enterprise systems. The course focuses on the four most popular open source frameworks in the industry: AJAX, Spring, Struts and Hibernate.

Prerequisite: J2EE 5 Enterprise Programming with IBM's Rational Application Developer COMP-426 or equivalent knowledge/experience.

HOURS: 42 **FEE:** IC: \$385

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 13 – Dec 20	M	7-10 pm	PRO
Winter	821	Jan 10 – Apr 18	M	7-10 pm	PRO
Spring	841	May 9 – Aug 22	M	7-10 pm	PRO

ORACLE DATABASE ADMINISTRATION FUNDAMENTALS 1

COMP-451

This course is designed to give the Oracle database administrator (DBA) a firm foundation in basic database administrative tasks. You will gain a conceptual understanding of the Oracle database architecture and how the architectural structures work and interact with one another. You will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner in order to have a well-designed and operational database. The instructor-led lesson topics are reinforced with structured hands-on practices.

Prerequisite: Introduction to Oracle SQL COMP-450 or equivalent knowledge

HOURS: 42 **FEE:** IC: \$595 (inc Oracle Kit)

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 7– Dec 19	Su	9 am-4 pm	PRO
Winter	821	Mar 13 – Apr 24	Su	9 am-4 pm	PRO
Spring	841	July 10 – Aug 21	Su	9 am-4 pm	PRO

ORACLE DATABASE ADMINISTRATION FUNDAMENTALS 2

COMP-452

This course gives the Oracle database administrator (DBA) a firm foundation in fundamental database administrative tasks. Learn about loading and transporting for databases, and the utilities used to perform these activities. You will also be introduced to networking concepts and configuration parameters, as well as how to solve some common network problems. Examine backup methodologies based on business requirements in a mission critical enterprise. Use multiple strategies and Oracle Recovery Manager to perform backups, and restore and recovery operations.

Prerequisite: Oracle DBA Fundamentals 1 COMP-451 or equivalent knowledge/experience

HOURS: 42 **FEE:** IC: \$595 (inc Oracle Kit)

TERM	TERM	SEC. #	DATE	DAY	TIME
Fall	801		Sept 12 – Oct 24	Su	9 am-4 pm
Winter	821		Jan 16 – Feb 27	Su	9 am-4 pm
Spring	841		May 8 – June 19	Su	9 am-4 pm

PROGRAMMING 1

(INTRODUCTORY PROGRAMMING CONCEPTS)

COMP-100

This course includes design and programming concepts, logic and program structures, and the development of business applications. The environment will be Visual Studio.NET. This course is recommended for those who have never programmed before and/or for those who wanted to pursue further studies in the .NET or IBM Java certificates.

HOURS: 58 **FEE:** IC: \$376.95

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 16 – Dec 16	Th	7-10 pm	ASH
Winter	821	Jan 13 – Apr 14	Th	7-10 pm	ASH
Spring	841	May 12 – Aug 11	Th	7-10 pm	ASH

RF TECHNOLOGY

CCTC 568

This course introduces the students to radio frequency (RF) transmission in both wired and non-wired (wireless) media. The characteristics of signal propagation are introduced and numerous definitions, parameters and technical measures used in the RF field are studied. Simple mathematical, graphical and computer methods will be used to solve a variety of technical problems.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 12 – Dec 12	Sun	10 am-1 pm	PRO

Centre for Students with Disabilities

If you are a Centennial student with a disability, please contact our Centre for Students with Disabilities at 416-289-5000, ext. 2627, e-mail csd@centennialcollege.ca or visit centennialcollege.ca/csd. These services are free and confidential to all Centennial students!

SELECTING AND IMPLEMENTING**SOFTWARE TESTING TOOLS****SQAT-003**

This course examines the automated software test tool environment and presents discussions of which types of tools to consider, and what their potential impact is on a project or an organization – selection criteria and implementation challenges are discussed in depth. Strategies for success are presented.

Prerequisite: Writing Testable Requirements SQAT-002 or equivalent knowledge/experience

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 22 – Feb 26	Sa	9 am-3 pm	MOR
Spring	841	May 14 – June 18	Sa	9 am-3 pm	MOR

SHAREPOINT CUSTOMIZATION & DEPLOYMENT**SHAR-003**

This course provides IT professionals with skills to upgrade their SharePoint 2003 deployments to SharePoint 2007. It simulates the challenges that a real-world SharePoint administrator will face; and provide best practices for upgrading their production SharePoint deployments.

Prerequisite: Installing & Configuring SharePoint SHAR-002

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 19 – Oct 24	Su	9 am-3 pm	MOR
Winter	821	Jan 23 – Feb 27	Su	9 am-3 pm	MOR

SHAREPOINT MOSS ADVANCED FEATURES**SHAR-004**

This course covers the Advanced Features of MOSS 2007 such as Web Content Management, Records Management, Forms Services and Business Data Catalog and integration with other Microsoft programs such as Access.

Prerequisite: SharePoint 2007 Administration SHAR-003

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 7 – Dec 12	Su	9 am-3 pm	MOR
Winter	821	Mar 6 – Apr 10	Su	9 am-3 pm	MOR

SHAREPOINT WORKFLOW & INFOPATH**SHAR-005**

This course uses InfoPath 2007 and workflows written with SharePoint Designer to automate business processes.

Prerequisite: SharePoint MOSS Advanced Features SHAR-004, Software Applications Workshops

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 23 – Feb 27	Su	9 am-3 pm	MOR
Spring	841	May 15 – June 19	Su	9 am-3 pm	MOR

SOFTWARE QUALITY ASSURANCE**SQAT-005**

Course content includes: process management – tailoring software processes; foundations and tools of software quality processes, and key standards and guidelines for software quality engineering. Additional topics are: introduction to risk management – the importance of identifying, mitigating and controlling software project risks; managing projects with software tools; planning for tools use on a software development project; and configuration management – processes for use throughout the product development life.

Prerequisite: Managing the Testing Process SQAT-004 or equivalent knowledge/experience

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Spring	841	May 14 – June 18	Sa	9 am-3 pm	MOR

SOFTWARE TESTING AUTOMATION TOOLS AND BEST PRACTICES**SQAT-006**

This course will leverage Best Practice in industry standards in automation tools in enabling process improvement, particularly in defect management, load testing & functional testing leading to process improvement and maturity throughout the testing phases. Hands-on open-source tools and proprietary tools will be utilized.

Prerequisite: Software Quality Assurance SQAT-005 or equivalent knowledge/experience

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Spring	841	July 9 – Aug 13	Sa	9 am-3 pm	MOR

TCP/IP AND OTHER INTERNET PROTOCOLS**CETE-978**

This course takes an in-depth look at the standardization process, which ensures interoperability between competing systems on the Internet. Learn the OSI Reference Model. Explore how the TCP/IP Protocol Suite fits into the OSI Model. Examine each OSI layer through hands-on examples. Learn the inner workings of application level protocols such as SMTP, FTP, and HTTP.

Recommended: Familiarity with accessing the Internet

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 18 & 19	Sa/Su	9 am-4 pm	PRO
Winter	821	Jan 22 & 23	Sa/Su	9 am-4 pm	PRO
Spring	841	May 28 & 29	Sa/Su	9 am-4 pm	PRO

THREATS AND ATTACKS**CETE-931**

As network technologies expand every day, so do the mechanisms used by crackers. This hands-on course examines the types of attacks commonly used and explores how to assess the risks of emerging threats. Non-technical attacks, including social engineering techniques and litigation threats, will be discussed.

Prerequisite: Completion of Introductory Network Security CETE-208 and TCP/IP and Other Internet Protocols CETE-978 or equivalent experience.

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 2 & 3	Sa/Su	9 am-4 pm	PRO
Winter	821	Feb 5 & 6	Sa/Su	9 am-4 pm	PRO
Spring	841	June 11 & 12	Sa/Su	9 am-4 pm	PRO

UNIX SHELL SCRIPTS**CEUN-932**

This course introduces Perl and compares it with the scripting languages introduced in earlier courses. Topics include manipulating text, validating user input and formatting output. Learn to use positional parameters and variables to pass information, and use conditional constructs to have scripts make decisions.

Recommended: Completion of UNIX/Linux Operations for Users CEUN-902 or equivalent experience using UNIX

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 2 & 3	Sa/Su	9 am-4 pm	PRO
Winter	821	Feb 5 – 6	Sa/Su	9 am-4 pm	PRO
Spring	841	June 11 – 12	Sa/Su	9 am-4 pm	PRO

UNIX SYSTEMS ADMINISTRATION**CEUN-911**

This course examines UNIX system administration and maintenance. Learn how to maintain user accounts, manage filesystems, run backup and restore utilities, perform data integrity checks, and test system security.

Recommended: Completion of UNIX/Linux Operations for Users CEUN-902 or equivalent experience using UNIX

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 16 & 17	Sa/Su	9 am-4 pm	PRO
Winter	821	Feb 12 & 13	Sa/Su	9 am-4 pm	PRO
Spring	841	June 18 & 19	Sa/Su	9 am-4 pm	PRO

UNIX/LINUX INSTALLATION**CEUN-913**

Emphasizing the use of UNIX as a secure server platform, you will perform installations on commodity hardware using popular freely available UNIX distributions based on BSD and Linux. Review package selection, hardware requirements, base system installation, initial configuration and post-installation security checks.

Recommended: Completion of UNIX Systems Administration CEUN-911 and UNIX/Linux Security CEUN-912 or equivalent experience.

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct 30 & 31	Sa/Su	9 am-4 pm	PRO
Winter	821	Mar 5 & 6	Sa/Su	9 am-4 pm	PRO
Spring	841	July 9 & 10	Sa/Su	9 am-4 pm	PRO

UNIX/LINUX OPERATIONS FOR USERS

CEUN-902

Learn basic methods of secure shell scripting. Practise writing shell scripts to automate tasks. Compare AWK to shell scripts. Use scheduling utilities to run routine tasks such as back-ups in off-peak periods.

Recommended: Completion of Introduction to UNIX/Linux CEMC-971 or equivalent experience

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 25 & 26	Sa/Su	9 am-4 pm	PRO
Winter	821	Jan 29 & 30	Sa/Su	9 am-4 pm	PRO
Spring	841	June 4 & 5	Sa/Su	9 am-4 pm	PRO

UNIX/LINUX SECURITY

CEUN-912

Examine role of UNIX security in a typical corporate environment. Learn how to safeguard systems using the standard tools that are packaged with every UNIX distribution. Learn how password recovery tools work. Explore the use of UNIX as a firewall and VPN platform.

Recommended: UNIX System Administration CEUN-911 or equivalent experience

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Oct. 23 & 24	SatSu	9 am-4 pm	PRO
Winter	821	Feb 26 & 27	Sa/Su	9 am-4 pm	PRO
Spring	841	June 25 & 26	Sa/Su	9 am-4 pm	PRO

VOICE OVER IP – AN INTRODUCTION

CCTC-550

Learn the concepts of VoIP communications and how this exciting new technology can be applied to a business or home environment. Examine the equipment and technology that allows communication to occur over existing IP networks and learn how it is dramatically reduces the cost of modern telecommunications. This is an introductory course and forms the basis for more advanced studies in VoIP.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 16 – Dec 16	Th	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO

WIDE AREA NETWORKING

NETW-405

This course expands on the knowledge that the student has gained in Local Area Networks and Interconnecting LANs and expands it to include the wide area arena. The student will learn about internetworking theory, WAN routing, remote access and the Internet. Emphasis is placed on network design, maintenance and security. This course completes the knowledge transfer required to obtain the Cisco CCNA designation.

Contact Allan Reid via email for further information areid@centennialcollege.

WIRELESS COMMUNICATIONS

CETE-941

Today’s fast paced corporate environment requires network connectivity to be available anytime, anywhere – without the restriction of wires. This course will explore both the technology that is currently available, as well as the various standards that are currently in place and those under development. The limitations and advantages of each will be discussed and an overview of the process of designing a wireless solution will be explored.

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Sept 14 – Dec 14	Tu	7-10 pm	PRO
Winter	821	Jan 11 – Apr 12	Tu	7-10 pm	PRO

WIRELESS LANS

CCTC-565

This course introduces the student to Wireless LAN technologies focusing on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It provides a comprehensive overview of technologies, security, implementation and design best practices. This hands-on course will emphasize using wireless technologies as an extension to the wired network.

Recommended: an understanding of networking technology and a familiarity with using Cisco equipment such as that gained by completing CCTC-501 and CCTC-503 (not a prerequisite).

HOURS: 42 **FEE:** IC: \$325

TERM	SEC. #	DATE	DAY	TIME	LOC
Winter	821	Jan 12 – Apr 13	W	7-10 pm	PRO
Spring	841	May 11 – Aug 10	W	7-10 pm	PRO

WORKING WITH LINUX GRAPHICAL USER INTERFACES

CEUN-951

Linux has rapidly emerged as a competitive desktop computing platform. The Linux Terminal Server Project (LTSP) allows organizations to re-deploy legacy hardware in configurations that outperform current commercial operating systems at a fraction of the price. This hands-on course shows how to build a cost-effective networked desktop environment with LTSP. Learn how to install LTSP and configure thin clients to connect to an LTSP server and use the full array of corporate desktop applications.

Recommended: Completion of UNIX Shell Scripts CEUN-932 or equivalent experience

HOURS: 12 **FEE:** IC: \$250

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 6 – 7	Sa/Su	9 am-4 pm	PRO
Winter	821	Mar 12 – 13	Sa/Su	9 am-4 pm	PRO
Spring	841	July 16 – 17	Sa/Su	9 am-4 pm	PRO

WRITING TESTABLE REQUIREMENTS

SQAT-002

This course provides techniques on how best to write requirements. With properly written requirements, the next step is to identify a set of tests that adequately cover those requirements.

Prerequisite: Introduction to Testing Principles & Methodologies SQAT-001 or equivalent knowledge/experience

HOURS: 30 **FEE:** IC: \$395

TERM	SEC. #	DATE	DAY	TIME	LOC
Fall	801	Nov 13 – Dec 18	Sa	9 am-3 pm	MOR
Winter	821	Mar 5 – Apr 9	Sa	9 am-3 pm	MOR
Spring	841	July 9 – Aug 13	Sa	9 am-3 pm	MOR

Prerequisites please!

It is your responsibility to ensure program requirements and course prerequisites are met. If you lack appropriate prerequisites (or credit) for a course, you may be asked to withdraw or transfer to a more appropriate course, with the risk of academic/financial penalty. Call 416-289-5207 for more information.