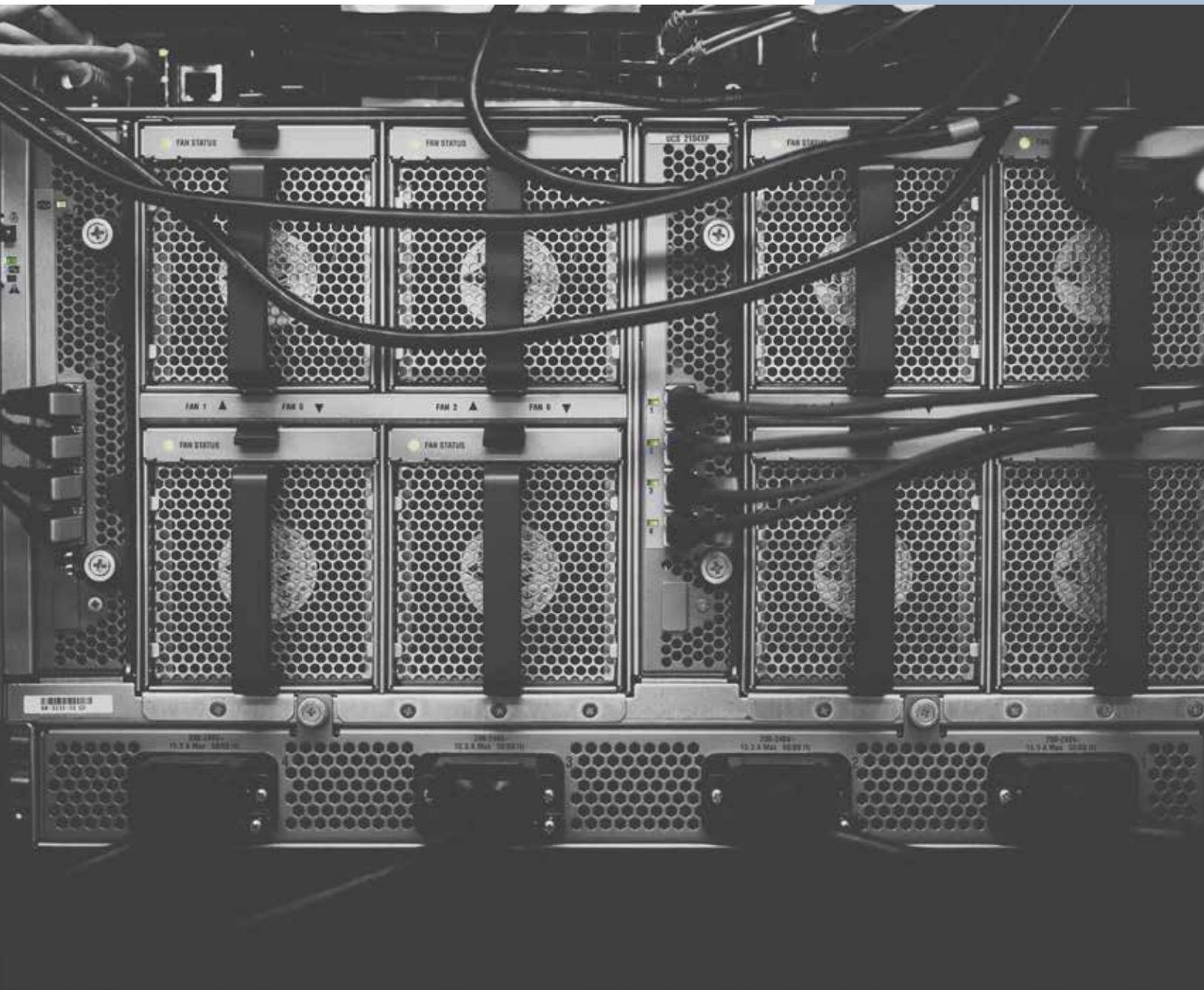


# NETWORK AND SYSTEM SOLUTIONS SPECIALIST CO-OP DIPLOMA



*Empower your career*



**CORNERSTONE**  
International Community College of Canada



# YOUR SUCCESS OUR PRIORITY

## Network and system Solutions Specialist

### Co-op Diploma

#### *Curriculum Overview*

Network and System Solutions Specialist diploma program is designed for students who want to pursue a career in Information Technology to meet industry demand for Computer Technicians, System and Network Administrators. The program focuses on learning the skills needed for IT infrastructure services, computer and network operating system software, and data center & cloud management.

Through hands-on, progressively intensive courses, students will gain insights on principles of computing technologies, hardware and software theories, network communications, planning, implementation, security, administration, maintenance and troubleshooting of various computers and networking systems.

“

*“Our industry does not respect tradition - it only respects innovation”* | Satya Nadella

#### *Co-op Work Term Overview*

The co-op work term is an essential step in our students development. By working directly with Canadian tech companies, students will have the opportunity to learn practical skills that compliment their academic learning. This will ground the theories and practice studied inside the classroom and, at the same time, help them to develop their personal and professional network giving them the industry experience they need to start their careers.

The average salary for a Computer Engineer in BC is \$57,145 CAD per year.”



**Program duration** 24 months total

**12**  
months

+

**12**  
months

Academic  
training

Co-op  
work

### **Career opportunities:**

Service Desk Technician

Desktop Technician

Support Technician

System Administrator

Network Administrator

Computer Engineer

Network Engineer

Datacenter Engineer

Cloud Analyst

Windows Architect

Solution Architect

Computer Analyst

Security Analyst

### **Admission requirements**

1. High school graduation or equivalent; or 18 years of age.
2. A short written essay from the student explaining why they are interested in the program and how the program can assist them to meet their future goals.
3. The minimum level of English language proficiency is one of the following:
  - English 12 - minimum final grade “C”
  - TOEFL PBT – 513; CBT – 183; iBT – 65;
  - TOEIC – 620;
  - IELTS – 5.5;
  - Cornerstone Placement Test – Level 5\*



**You may study ESL courses prior to starting the program**



## *Learning Objectives*

This program maps directly to the certification pathways for recognized industry designations. Upon completion, the successful student will have reliably demonstrated the ability to:

### *Understand*

- Network theory and communications methods
- GNU and Unix commands
- Key ITIL concepts and principles for improving IT operations

### *Implement and Configure*

- Virtualization and consolidation environments
- compliance and operational security
- Management with ADDS, ADFS, ADCS, ADRMS
- System Center 2012, Windows Server 2012 and Microsoft System Center 2012

### *Design*

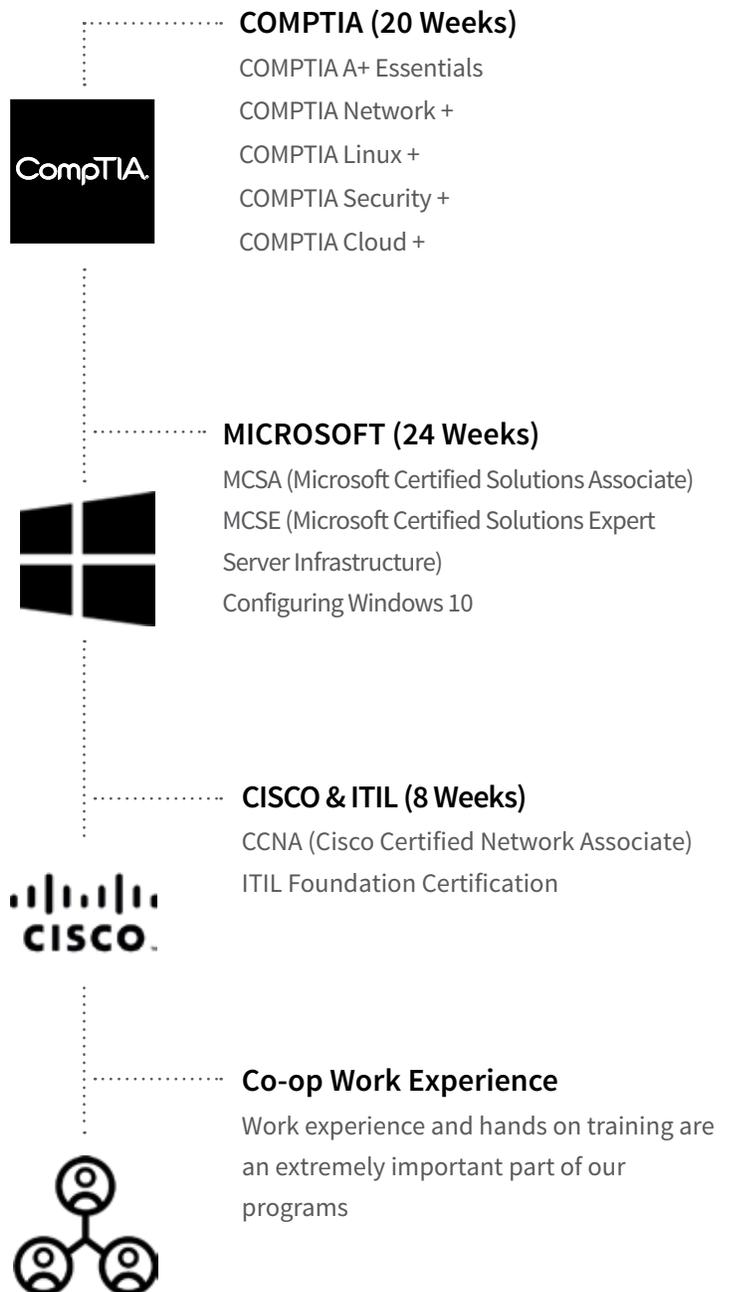
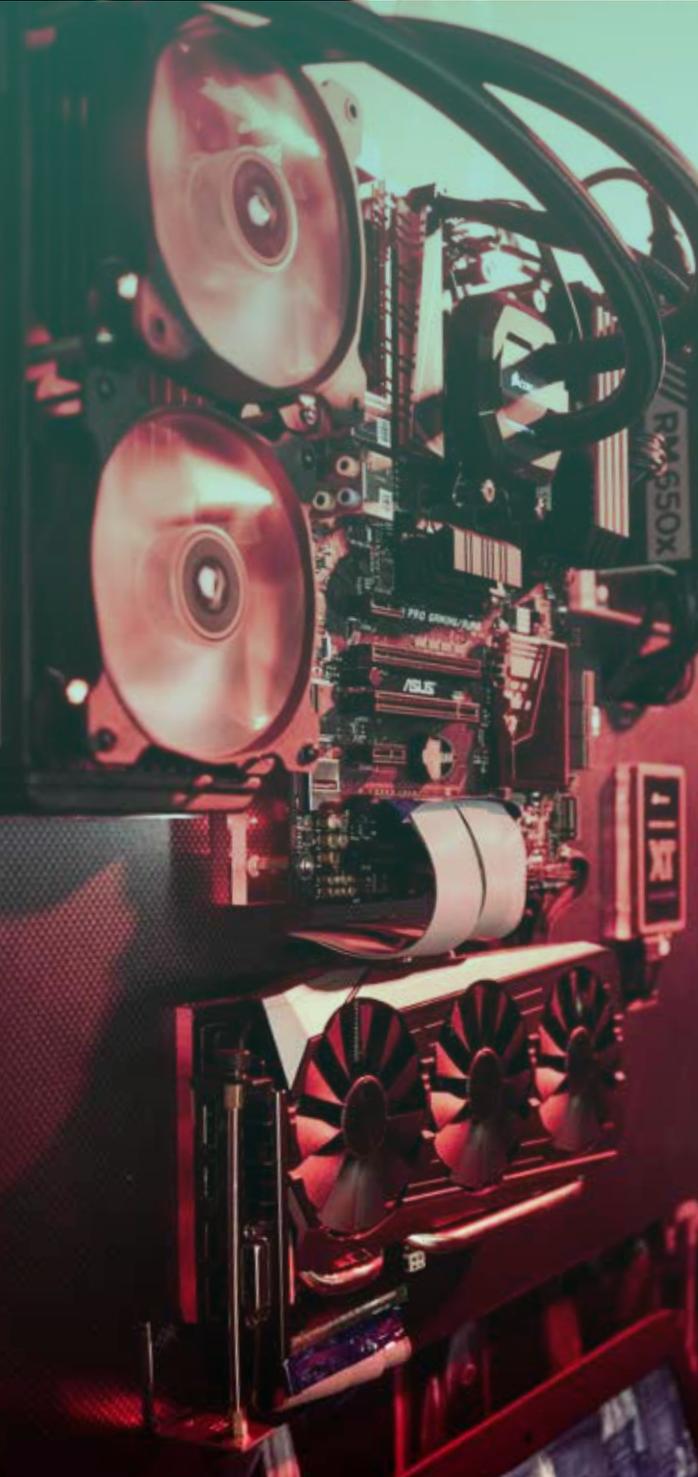
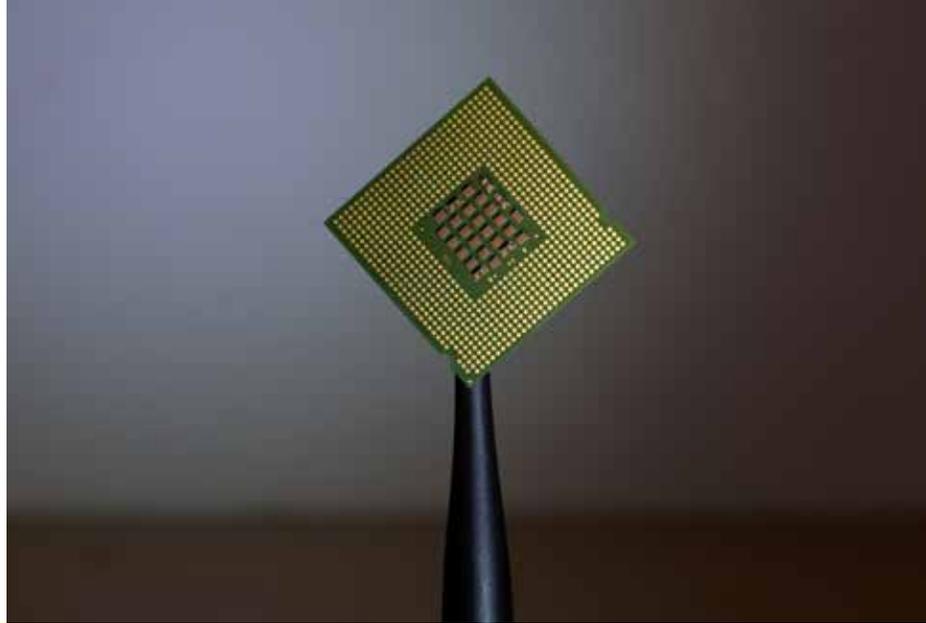
- Enterprise Campus - hierarchical modular fashion using IP management, borderless networks
- Modern data center using Cisco Systems and industry best practices

### *Manage and Maintain*

- Private and public cloud infrastructure services
- Linux devices, file systems and hierarchy standards
- Active directory domain services
- User, computer and service accounts with organization units and AD site architecture

## Course Objectives

Each course in the Network and Systems Solutions program is designed to build a strong foundation of globally demanded skills for students who desire a career in the IT industry. Throughout the program, students will work directly with PC and mobile device hardware, software such as Comptia, Microsoft, Cisco, and learn ITIL standards with and emphasis on trouble shooting and risk management.



## Program Curriculum

### TIA 100 Comptia A · 80hr

A+ establishes best practices in troubleshooting, networking and security across a variety of devices to set the stage for IT careers. It covers PC hardware and peripherals, mobile device hardware, networking and troubleshooting hardware and network connectivity issues.

### TIA 200 Comptia cloud · 30hr

Cloud+ course validates the skills and expertise of IT practitioners in implementing and maintaining cloud technologies. Cloud+ accredits IT professionals with the constantly changing and advancing knowledge they need to be successful in today's cloud environment.

### TIA 300 Comptia Security · 80hr

Security+ is the course globally trusted to validate foundational, vendor-neutral IT security knowledge and skills. As a benchmark for best practices in IT security, this certification covers the essential principles for network security and risk management – making it an important stepping stone of an IT security career.

### TIA 400 Comptia Linux · 80hr

This course introduces Linux, Powered by LPI certifies foundational skills and knowledge of Linux. With Linux being the central operating system for much of the world's IT infrastructure, Linux+ is an essential credential for individuals working in IT, especially those on the path of a Web and software development career.

### TIA 500 Comptia Network · 80hr

Network+ is a vendor neutral networking certification that is trusted around the world. It validates the essential knowledge and skills needed to confidently design, configure, manage and troubleshoot any wired and wireless networks. CompTIA Network+ certified individuals are in demand worldwide. Data networks are more crucial for businesses than ever before.

### MSC 400 Configuring Windows · 80hr

This course is designed to provide students with the knowledge and skills required to install and configure Windows 10 desktops and devices in a Windows Server domain corporate environment. These skills include learning how to install and customize Windows 10 operating systems, applications, security, maintenance and updates

### MSC 410 Installing And Configuring Windows Server 2012 R2 · 80hr

This course covers implementing, managing, maintaining and provisioning services and infrastructure in a Windows Server 2012 environment. This course focuses on the initial implementation and configuration of core services, such as Networking, Storage, Active Directory Domain Services (AD DS), Group Policy, File and Print Services, and Hyper-V.

### MSC 411 Administering Windows Server 2012 R2 · 80hr

This course focuses on the administration tasks necessary to maintain a Windows Server 2012 infrastructure such as configuring and troubleshooting name resolution, user and group management with Active Directory Domain Services (AD DS), Group Policy and other critical roles and features.

### MSC 412 Configuring advanced windows server 2012 r2 services · 80hr

This course covers implementing, managing, maintaining and provisioning advance services and infrastructure in a Windows Server 2012 environment. This course primarily covers advanced configuration of services necessary to deploy, manage and maintain a Windows Server 2012 infrastructure.

### MSC 413 Designing and implementing a server infrastructure · 80hr

In this course, students will learn how to plan and implement solutions in Windows Server 2012 which includes managing and maintaining a server infrastructure, planning and implementing a highly available enterprise infrastructure for virtualization and identity management.



MSC  
414

### Implementing an Advanced Server Infrastructure · 80hr

This course covers the knowledge and skills to plan and implement a highly available, secure infrastructure with focus on Active Directory Federation Service (AD FS), public key infrastructure (PKI), and Active Directory Rights Management Services (AD RMS) and integration with System Center products.

CIS  
100

### Ccna Routing And Switching · 80hr

This course is for entry-level network engineers that helps maximize your investment in foundation networking knowledge and increase the value of your employer's network. This also validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks.

ITI  
100

### ITIL 2011 Foundation · 80hr

ITIL® is a set of best practices guidance that has become a worldwide- adopted framework for Information Technology Services Management (ITSM) by many Public & Private Organizations. Since early 1990, ITIL® has been evolving from focusing on Functions and Processes under versions 1 and 2 to focusing on the Full Service Life-cycle Management under current version.

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### Co-op Work Term

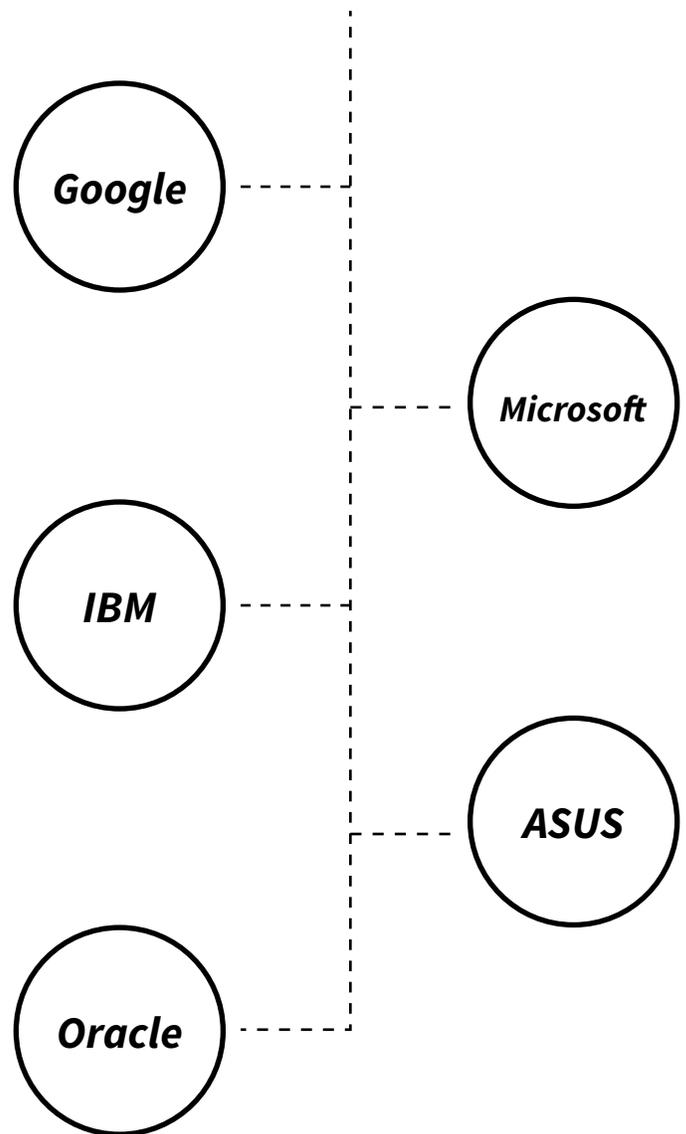


# Work in an IT Infrastructure Profession

- Managed Services
- System Services
- Data center services
- Security Services
- Cloud Services
- Network ServicesW



## Recognized IT Companies



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