

Information Technology Professional (Infrastructure, Cloud & Cybersecurity)

The Information Technology Professional diploma program at triOS is 82 weeks. It includes a 16-week internship. triOS College knows what it takes to prepare graduates for careers in this field. Working with industry groups and employers allows triOS to provide students with the most advanced curriculum available, the latest software knowledge and the most relevant certifications.

The Information Technology Professional program is the most comprehensive of the triOS IT program options. This diploma program prepares students for up to 15 industry certification exams and provides 8 vouchers to write the certifications they wish to pursue.

Program Benefits

- ✓ Half Day Classes
- ✓ Job Placement Assistance
- ✓ Small Class Sizes
- ✓ Certification exam vouchers included
- ✓ Qualified instructors

Here's a look at some of the courses included in this program:

PC & Windows Administration

PC Support, Windows Client Administration, Windows Server & Active Directory Administration

Network & Linux Administration

IT Service & Project Management, Network Administration, Linux Administration, Security Fundamentals

Infrastructure & Cloud Administration

Managing Infrastructure Services Server, Cloud & Automation Technologies

Advanced Networking & Cybersecurity Administration

Advanced Network Technologies, Cybersecurity

Internship (16 weeks)

Certification Paths:



Employment and Wage Outlook for Careers in this field:



Employment Rate based on 2022 contactable triOS graduates employed in a related field within 12 months.

Source: workingincanada.gc.ca

NOC Code: 2171/21220, 21221, 21222 - **Wage data rounded down to the nearest dollar. Average wage doesn't reflect the starting salary but represents the middle value between lowest to highest wages. Local (or regional) income may vary. Last updated in Jan 2024.

Career Opportunities

Windows Server Administrator
Active Directory Administrator
Project Manager
Cisco Administrator
Linux Administrator
Security Specialist
Cybersecurity Analyst

Employers Who Have Hired triOS Grads



Some Other Employers Are:

- Nexus
- Siemens IT
- TD Canada Trust

"I have to honestly say that triOS College is amazing, the staff is extremely helpful and they strive with you for your success. My teachers were awesome, they taught me so much and I am truly grateful for having them. I would recommend this college to anyone!"

-Nick R.,
triOS College Information Technology Professional Graduate

Information Technology (IT) Professional (Infrastructure, Cloud & Cybersecurity) + Internship

NOC Code: 2171/21220, 21221 & 21222

Diploma Program Length:

82 Weeks

Student Success Strategies
Career Management

2 Weeks

Managing Infrastructure Services
Server, Cloud & Automation
Technologies

16 Weeks

PC Support
Windows Client Administration
Windows Server & Active Directory Administration

16 Weeks

Advanced Network Technologies
Cybersecurity

16 Weeks

IT Service & Project Management
Network Administration
Linux Administration
Security Fundamentals

16 Weeks

Internship

16 Weeks

Program highlights include:

- Registered and approved diploma
- 8 Certification Exam Vouchers ***
- Practice Tests (where applicable)
- Career services
- Job search assistance
- Alumni program benefits

***The courses within the program relate to 15 industry certification examinations. Students are provided with 8 certification exam vouchers to write the certifications they wish to pursue.

Certification Paths:



Admission Requirements:

1. Student has an Ontario Secondary School Diploma or equivalent, OR Is 18 years of age or older on or before the program begins AND can pass a qualifying test that has been approved by the Superintendent.*
2. The approved qualifying test for this program is the Wonderlic test. A passing score for this program is 20.

*Applicants from other Canadian provinces must be at least 19 years of age and a minimum of 1 year out of high school by the program start date and successfully pass an academic achievement test.

International Students: Please contact us for more detail regarding admissions requirements.

Accreditation Policy:

Like all post-secondary institutions in Ontario, triOS College reserves the right to accept or deny advanced standing into its programs.

Certifications:

Students who successfully complete this program will be eligible to write certification exams leading to the following designations: CompTIA A+ (2 vouchers), CompTIA IT Project+, CompTIA Network+, CompTIA Linux+, CompTIA Security+, CompTIA Server+, CompTIA Cloud+, CompTIA CySA+, CompTIA Pentest+, CompTIA CASP+, Cisco CCNA, CWNA and Microsoft Desktop Administrator Associate (MDAA): Windows 10 (2 Vouchers). These certifications are comprised of fifteen (15) individual certification examinations. Students are provided with eight (8) certification exam vouchers to write the certifications they wish to pursue.

Note:

In order to continuously improve our programs, triOS College reserves the right to modify programs at any time. Program delivery order may vary depending on the program start date. This diploma program may not be available at all campuses. The program may have additional reading weeks, depending upon the start date.

You can find our Key Performance Indicators (graduation rate, employment rate, etc.) at www.triOS.com/kpi.

How AI is Used in Technology Programs:

What is AI?

Artificial Intelligence (AI) is an *evolving* technology that attempts to simulate human intelligence using computer programs. At the heart of AI is **Machine Learning (ML)**, which correlates large amounts of data to learn the relationships between different data elements. AI and ML products can be used by both IT professionals and software developers to save time on certain tasks.

How do IT professionals leverage AI on the job?

Most IT professionals use AI to obtain or generate information that they would have previously obtained online using a search engine, such as Google. This could include generating summaries for reports and documentation, generating scripts (e.g., PowerShell, BASH), and generating infrastructure configuration templates (e.g., Ansible playbooks).

How do software developers leverage AI on the job?

Nearly all modern development tools now have AI-based auto-suggestion, code generation, and documentation abilities. Software developers can choose to autofill in certain lines of code, as well as generate the initial structure (called stub code) for a new program to give them a solid starting point for development. Additionally, software developers can leverage AI tools to add the necessary documentation to existing code to save time.

How do we approach AI in our programs?

While AI can be used to save time, all AI-generated content must be reviewed in depth by someone with content expertise to ensure that it provides the necessary functionality, and in a way that adheres to corporate standards, security, and software/copyright licenses. Thus, you must first have a solid understanding of IT administration or software development to leverage AI effectively in those fields.

At triOS, we leverage AI to generate content throughout several courses in the program, but only where appropriate, and in ways that mimic the use of AI in the workplace. Additionally, all AI generated content is thoroughly reviewed before use to ensure functionality, security, copyright adherence, license compatibility, and quality. Students will not learn how to create new AI technologies; however, students will learn how to use existing AI tools where appropriate.

Course Description:

Student Success Strategies

This course stresses the importance of developing non-technical skills to enhance personal, academic and career success. This includes understanding learning styles and honing practical study skills, such as memory, reading, note- and test-taking techniques. Personal exercises will focus on teamwork, setting goals and maintaining a positive attitude. Techniques for managing change, stress, and conflict will also be explored.

Career Management

In this module, you will create and refine your résumé and LinkedIn Profile. You will write cover letters and learn the value of customizing cover letters to specific job postings. You will have the opportunity to apply this knowledge as you conduct a job search and write a cover letter tailored to an ideal job post. Through research, you will create a list of top employers and target current industry opportunities. You will learn about current methods for applying to job postings using technology. You will also gain an understanding of the job interview process, typical interview questions and possible responses, and expectations of both the interviewer and interviewee. In addition, you will engage in practical application of the interview process through roleplay. Topics such as negotiating salary, self-management, and on-the-job success for placements and postgraduate employment will be also covered.

PC Support

This course introduces you to the essential operating system skills required of a PC support technician, and covers the concepts tested on the CompTIA A+ certification. More specifically, you will learn how to configure, troubleshoot, and maintain both computer hardware and the Windows family of desktop operating systems. Additionally, you will examine the basic configuration of Linux, macOS, and mobile operating systems.

Windows Client Administration

This course introduces the skills and knowledge necessary to install, configure and support Microsoft Windows client operating systems, and covers the concepts tested on the Microsoft 365 Certified: Endpoint Administrator Associate certification exam. More specifically, students learn how to deploy and upgrade Windows clients, as well as configure storage, access, devices, network connectivity and security. Additionally, students learn how to administer systems using PowerShell, as well as leverage online resources and AI tools to generate PowerShell scripts.

Windows Server & Active Directory Administration

This course provides an in-depth look at the different tasks necessary to administer, secure, and troubleshoot Windows Server 2019 systems. Focus is placed on server deployment and management, as well as data, storage, network service, virtualization, and container configuration. Additionally, this course covers Active Directory configuration and management.

IT Service & Project Management

You will gain an understanding of business processes and communication, as well as time and project management skills that are vital for success in today's IT industry. Through the use of examples, demonstrations, and activities, you will examine the strategies and techniques that are commonly used within the IT industry, with a focus on ITIL processes and project management. Additionally, you will leverage AI tools to produce several industry grade deliverables for a complete IT project. This course also covers the concepts tested on the CompTIA Project+ certification.

Network Administration

In this course, students examine the theory and concepts required to successfully administer and troubleshoot IP-based computer networks and network technologies. Moreover, this course covers the concepts tested on the CompTIA Network+ certification.

Linux Administration

Linux provides the foundation for many systems today including embedded and mobile devices, supercomputers, and the cloud. In this course, students learn how to install, configure, and manage Linux systems and the network services that they run. Moreover, this course covers the concepts tested on the CompTIA Linux+ certification.

Security Fundamentals

This course covers the core concepts that provide for security within an enterprise environment. Focus will be placed on the common security tools and procedures that every IT professional must know when working with technology in an organization. Moreover, this course covers the concepts tested on the CompTIA Security+ certification.

Managing Infrastructure Services

Most job roles within organizations today require access to information provided by Web, database, and email services. This course introduces the concepts and procedures required to install, manage, and support SQL database servers, as well as email and Web services. Additionally, students leverage AI to generate SQL databases and websites.

Server, Cloud & Automation Technologies

In this course, students learn how to deploy and manage servers, both on-premises and within a cloud environment. More specifically, students learn how to provision servers, automate server deployment and configuration, leverage AI tools to generation automation scripts, as well as manage virtual machines and containerized applications using open source frameworks and technologies. Furthermore, this course covers the concepts tested on the CompTIA Server+ and Cloud+ certifications.

Advanced Network Technologies

In this course students learn the configuration and support of Cisco routers, switches, and services. Additionally, students explore the design, configuration, and management of WLANs and other wireless technologies. Students will also leverage AI tools to generate an industry grade Wi-Fi infrastructure proposal for a campus location. This course covers the concepts tested on the Cisco Certified Network Associate (CCNA) and Certified Wireless Network Administrator (CWNA) certification exams.

Cybersecurity

This course covers the procedures used to design, implement, and audit security within an enterprise environment, as well as detect, respond to, and investigate security breaches. During the course, students perform detailed vulnerability assessments and penetration tests on target systems and networks, as well as leverage AI tools to generate an industry grade security assessment that summarizes the results and remediation actions. Moreover, this course covers the concepts tested on the CompTIA Cybersecurity Analyst+, Pentest+, and CASP certification exams.

IT Professional Internship

At the successful completion of the classroom hours of this program, you will be placed in a 320-hour internship at an outside organization. You will have the opportunity to apply your new and developed skills in a real-world environment. Hosts include small, medium, and large organizations that have an Information Technology department, or organizations that provide technology and technology services.