Computer Information Systems Administration

Diploma Full-time <u>School of Energy</u>

Overview

The **Computer Information Systems Administration (CISA)** program is a two-year program that focuses on administration and configuration of Information Technology (IT) infrastructure such as wired and wireless local area networks (LANs) and wide area networks (WANs).

Delivery: in person. <u>See details</u>.

About the program

The Computer Information Systems Administration (CISA) program is a full-time program that provides graduates with a comprehensive skill set geared towards administration of computer networks and system. The CISA program emphasizes a hands-on, technical approach to training, where experience gained in labs and classrooms can be applied directly to business and industry.

The program focuses on Information Technology (IT) infrastructure solutions rather than computer engineering or software development. Training comprises of both theory and practical experience, where the goal is to have the students develop a skill set to be able to install, configure, maintain, monitor, and troubleshoot systems and hardware. To support this training, students are exposed to considerable hands-on activities using well equipped labs.

The first year consists of training that introduces students to computer hardware, operating systems, network infrastructure, and cybersecurity. Topics include Microsoft Active Directory services and networking, Cisco routing and switching, Linux administration as well as essentials of databases and programming. While much of the training aligns with industry certifications, students are not required to write any industry exams. Included in first year is a Business Skills for IT course that provides insight into the communication and management skills required in the IT sector.

The second year specializes in deploying and supporting the network infrastructure used in today's enterprise systems. Students leverage industry leading products from Cisco Systems, Microsoft, Fortinet, Juniper, Palo-Alto, Red Hat, SUSE, Oracle, VMWare, and others to create a secure, multiservice business solution. Students work with routing, switching, firewall, server, and client technologies to deploy reliable and redundant campus networks that support remote access and wide area interconnectivity. Topics include security, advanced routing and switching, Voice-over-IP (VoIP), and wireless access. Networked applications are explored and deployed including collaboration and messaging services. Students learn to leverage virtualization technologies, providing the responsiveness needed to support business applications. The integration of "cloud" services to an enterprise along with network management solutions provides insight into the complexities of an enterprise system. Students are encouraged to obtain more advanced industry certifications from Aruba, AWS, Cisco Systems, Microsoft, Oracle, Red Hat, Fortinet, Juniper, Palo-Alto, and VMWare.

Who it's for

Applicants should have a keen interest in computers, exposure to home networking, strong communication, troubleshooting, and problem solving skills.

What grads can do

CISA graduates have skills focused on maintaining network infrastructure and client support. Graduates are capable of working with a wide range of Cisco products, including routers, switches, firewalls, wireless systems, IP phones, and management tools.

Entrance Requirements

Find out more about getting started in the program!

If the Computer Information Systems Administration program interests you, review the entrance requirements. If you qualify, you may want to attend an information session [1] or become a student for a day.

Spend–A–Day with us

Want to learn more about our program before you apply? Come spend-a-day [2] with us. You'll meet students and instructors, and get a hands-on feel for what the program is about.

If you have questions regarding the entrance requirements or the application process, please visit Admission & Registration [3] , or if you want to discuss the program in more detail, contact the Department Head, Patrick_Duffey@bcit.ca or call 604-432-8592.

Application processing

Open to applications beginning October 1st (or next business day).

Applications are considered for a specific intake; this program does not carry a wait-list from year to year.

Entrance requirements

Applicants must meet all entrance requirements and will be accepted on a first qualified basis as long as space remains.

- **English language proficiency:** Category 2 [4] – English Studies 12 (67%) or equivalent

- **Math: one** of the following:
    - Pre-Calculus 11 (60%) or
    - Foundations of Math 11 (67%) or
    - Workplace Math 11 (73%) or
    - Other acceptable BC and Yukon courses [5]

Read more about how to meet BCIT's entrance requirements [6]

International applicants

This program is available to international applicants. A valid study permit [7] is required prior to starting the program.

Apply to program

To submit your application:

- Include proof of meeting all entrance requirements.
- Convert all transcripts and supporting documents to PDF files [8] .

- Have a credit card ready to pay the application fee.

Learn more about how to apply [10]

Scheduled Intakes

September each year.

myCommunication

Within two business days of submitting your completed application, BCIT will send a message to your personal and myBCIT email addresses. All correspondence regarding your application will be posted to your online myCommunication [11] account at my.bcit.ca [12] . We will send you an email when a new message is posted. It is important to watch for these emails or regularly check your account online.

You can expect to receive communication concerning the status of your application within four weeks.

Costs & Supplies

Find out how much you will need to complete your diploma in Computer Information Systems Administration!

The information below will help you determine the cost of taking the program and assist you in developing a budget for your two years of study. If you have concerns about being able to afford the program, please visit Financial Aid [13] to learn how you may benefit from financial assistance.

Tuition fees

Use our tuition estimator [14] to find tuition and fees for this program.

For more information on full-time tuition and fees, visit:

- Full-Time Studies Tuition & Fees [15]
- International Tuition & Fees [16]

Books & supplies

Approximately $500 per level for books and supplies.
(general estimated cost, subject to change)

The program consists of four levels spread over two-years.

Financial assistance

Financial assistance may be available for this program. For more information, please contact Student Financial Aid and Awards [17] .

Courses

Class hours

0830-1500, Monday through Friday

Program matrix

Level 1 (15 weeks)		Credits
CISA 1310	**Network Essentials**	5.0
CISA 1320	**Desktop Support & Maintenance**	5.0
CISA 1330	**Windows Server Essentials**	5.0
CISA 1340	**Linux Essentials**	5.0
CISA 1350	**Database Essentials**	5.0
CISA 1360	**Programming Essentials**	5.0
Level 2 (20 weeks)		**Credits**
CISA 2310	**IP Routing Fundamentals**	6.0
CISA 2320	**Ethernet Switching Fundamentals**	6.0
CISA 2330	**Windows Server Administration**	6.0
CISA 2340	**Linux Administration**	6.0
CISA 2370	**Network Security Fundamentals**	6.0
CISA 2380	**Business Skills for IT**	6.0
CISA 2390	**Campus Network Project**	4.0
Level 3 (15 weeks)		**Credits**
CISA 3310	**Advanced Ethernet Switching**	5.0
CISA 3320	**Deploying Wireless Systems**	5.0
CISA 3330	**Deploying Windows Services**	5.0
CISA 3350	**Deploying Messaging Systems**	5.0
CISA 3360	**Deploying VoIP Systems**	5.0
CISA 3370	**Enterprise Network Security**	5.0
Level 4 (20 weeks)		**Credits**
CISA 4310	**Advanced Routing Services**	6.0

CISA 4330	Enterprise Windows Services	6.0
CISA 4340	Unified Communications	6.0
CISA 4350	Deploying Cloud Services	6.0
CISA 4360	Managing Network Services	6.0
CISA 4370	Advanced Network Security	6.0
CISA 4390	Enterprise Network Project	4.0
Total Credits:		**140.0**

Transfer credit

Do you have credits from another BC/Yukon post-secondary school? Do you want to know if they transfer to courses here at BCIT? Check out BCIT's Transfer Equivalency Database [44] to find out.

Program Details

Program length

Two years, full-time

Grading

The passing grade for each course is 50%; students who achieve lower than 50% in a course will need to make up the course before they are eligible to earn the diploma. All courses must be passed to receive a diploma.

Program delivery

In person: This program is delivered on campus.

Program location

Burnaby Campus [45]
3700 Willingdon Avenue
Burnaby, BC

Graduating & Jobs

Job opportunities

Manufacturers such as Cisco, HP, and IBM, typically have "partners" who sell their products. It is with these partners that our students find employment. Other sources of employment include Internet Service Providers (ISPs), government, municipalities, hospitals, health authorities, management companies, airports, transportation services, insurance

companies, and many small businesses. If a computer network exists within a business and it grows to any size there is a demand for competent administrators to maintain this network and its clients. Graduates have the ability to continue developing their skills in more specialized areas such as wireless, security, storage area services, and voice services providing a path to higher pay and ensured employment.

Graduates also have experience supporting Linux and Microsoft clients and servers. Employment opportunities exist within Internet providers, cablevision, telephone companies, service outsourcing companies, and any IT department.

Ladder your credential

Upon graduation, students may also choose to continue their studies full-time, or to begin working in their chosen field while pursuing a degree part-time. CISA graduates are eligible to apply for the following bachelor's degree programs:

Bachelor of Technology – Digital Forensics and Cybersecurity [46]
Bachelor of Technology – Technology Management [47]
Bachelor of Applied Information Systems Technology – Information Systems – Northern Alberta Institute of Technology (NAIT) [48]

Graduate employment outcomes

The BCIT student outcomes report presents summary findings from the annual survey of former students administered by BC Stats one to two years after graduation. These reports combine the last three years of available results for the 2021-2023 BCIT Outcomes Surveys of 2020-2022 graduates and for Degree 2019-2021 graduates. The reports are organized into three-page summaries containing information on graduates' labour market experiences and opinions regarding their education. More detailed information can be accessed at the BC Student Outcomes [49] website.

To view these results, you may need to have the Adobe Acrobat Reader [50] installed in your Web browser.

* Computer Information Systems Administration [51]

Faculty, Advisors & Staff

Faculty

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Advisory committee

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Jeff Celmainis
Director, Park Place Technologies

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Richard Louie
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Director – Project Services, Charter

Cam Melvin
Consultant

Daryl Montgomery
Account Manager-BC, F5 Networks

Ralph Wright
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Contact Us

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Programs and courses are subject to change without notice.

List of links found on this page

This list includes all links found on this page for your reference.

[1] https://www.bcit.ca/infosessions/
[2] https://www.bcit.ca/about/visit/spend-a-day/
[3] https://www.bcit.ca/admission/
[4] https://www.bcit.ca/admission/entrance-requirements/english-language-proficiency/#category2
[5] https://www.bcit.ca/admission/entrance-requirements/equivalencies/bc-yukon-high-school/#math11
[6] https://www.bcit.ca/admission/entrance-requirements/
[7] https://www.bcit.ca/international-students/permits-visas-status/study-permits/
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[12] https://my.bcit.ca/
[13] https://www.bcit.ca/financial-aid/
[14] https://www.bcit.ca/admission/tuition-fees/estimator/?ref=catalogue
[15] https://www.bcit.ca/admission/tuition-fees/full-time-studies/
[16] https://www.bcit.ca/admission/tuition-fees/international-fees/#fulltimetech
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[41] https://www.bcit.ca/outlines/cisa4360/

[42] https://www.bcit.ca/outlines/cisa4370/

[43] https://www.bcit.ca/outlines/cisa4390/

[44] https://www.bcit.ca/admission/entrance-requirements/transfer-credit/

[45] https://www.bcit.ca/about/visit/campuses-directions/burnaby/

[46] https://www.bcit.ca/programs/forensic-investigation-digital-forensics-and-cybersecurity-option-bachelor-of-technology-full-time-part-time-847cbtech/

[47] https://www.bcit.ca/programs/technology-management-bachelor-of-technology-part-time-8350btech/

[48] https://www.nait.ca/programs/baist-information-systems?term=2020-fall&overviewtabs=contact

[49] https://bcstats.shinyapps.io/so_data_viewer/

[50] https://get.adobe.com/reader/

[51] https://www.bcit.ca/files/ir/gp/1930dipma.pdf

[52] https://www.bcit.ca/about/visit/spend-a-day/

[53] https://www.bcit.ca/international-students/

[54] https://www.bcit.ca/financial-aid/

[55] https://secure.bcit.ca/sis/apply/