

Applied Network Administration and Design

Associate Certificate Part-time [School of Computing and Academic Studies](#)

Overview

The Applied Network Administration and Design (ANAD) program covers expert use of a Windows PC, Network TCP/IP Data Communications, LINUX, Windows Server Cloud Administration, IT security foundations and applied virtual networks. Learn best practices for network server administration, and disaster recovery for mission critical business operations.

Delivery: in person. [See details.](#)

About the program

- Become an expert end-user of a Windows 11 PC
- Design scalable and secure networks to industry standards
- Use scripting tools to simplify network administration tasks
- Develop integrated and secure networked information systems
- Discover best practices for Linux and Windows Server administration
- [23 total credits \[1\]](#) with a choice of elective
- Enroll throughout the year to study course by course, nights and weekends, online or in person ([Downtown \[2\]](#) or [Burnaby campus \[3\]](#))

See the [Program Details \[4\]](#) to learn more about what you can expect from ANAD.

Who should complete the ANAD Associate Certificate?

This program might be for you if you:

- Are interested in designing network information systems
- Want to learn Network Administration skills and best practices
- Enjoy communicating with colleagues and clients both in person and via technical reports
- Have other IT or related post-secondary education and want to now focus on network server administration – ANAD was developed for those with prior IT and networking experience

Please check the [Entrance Requirements \[5\]](#) to ensure that ANAD is right for you.

What can Applied Network Administration and Design grads do?

- Evaluate and select appropriate hardware and operating systems
- Design and build networked information systems based on business needs
- Manage network operations and integrate related business applications
- Work as a Network Administrator, setting governance, policies, and access for users
- Ensure the network systems and data are protected from loss, compromise, or failure

Build your network skills.

Start with just one course: [COMP 1002 \[6\]](#)

Entrance Requirements

- BC High School Grade 12 English and Grade 12 Math, or equivalent knowledge.
- Prior post-secondary education and/or related work experience.

ANAD was developed for a specific audience, those who have prior education or experience and connections in this related field.

This program is aimed at mature students with other post-secondary education, and work experience looking to validate their knowledge, or those with connections to potential employers.

Students without related network experience or higher-level technical education are not candidates for Network Administrator roles.

ANAD is not designed for those students just out of high school with no other education or work experience, those students should consider completing a Diploma or Degree from BCIT in order to be well-positioned in the job market.

Note: This program is not designed to be completed in a Full-time delivery as each course has prerequisites and PTS scheduling varies from term to term. Depending on program start dates most students cannot complete **ANAD** in less than 4 terms due to prerequisites and the scheduling of part-time courses.

Please contact the department for course planning.

Start with just one course:

Complete COMP 1002 [7] Applied Computer Concepts prior to COMP 2629 – Enterprise Networking Fundamentals [8]

Please complete COMP 2629 [9] prior to declaring your program.

Students who have completed or who are in working toward BCIT's School of Energy's Network Administrator Technician, NAT – Associate Certificate will not be approved for Applied Network Administration and Design, ANAD due to learning outcome duplication.

International applicants

This program is not available to international students. View available programs [10]

Program declaration

Declaring your Flexible Learning (Part-time Studies) program ensures that BCIT is aware of your intent to complete a program as it is currently outlined and provides you the opportunity to apply for transfer credit.

To submit your declaration:

- Answer all questions completely.
- If required, convert transcripts and documents to PDF files [11].
- Have a credit card ready to pay the application fee.

Upon approval, a program plan letter will be sent to you confirming your program of study. Please allow approximately eight weeks for processing.

Learn more about program declaration [13]

Costs & Supplies

All Computing Flexible Learning programs are course-by-course registration.

Students should have a personal computer with internet access capable of running MS Windows 11.

There are typically only 8 courses required to complete ANAD.

Domestic students should budget \$4,500 for tuition, this program is not available to international students.

The average tuition cost for each COMP FLLEX course is around \$400-\$700 per course plus books.

Specific textbooks may be required at an additional cost, some courses also have lower cost eBook options.

Typical part-time students may complete the ANAD over 4-5 terms or 1.5 years with 2 courses per term depending on when they start.

This would equate to an average workload of 25+ hours per week between class time, reading and homework with 2 courses per term.

Attendance and participation are mandatory, students who skip classes or who do not participate may be dropped from a COMP course.

NOTE:

Please register early to avoid disappointment, our networking courses are very popular and fill weeks or months in advance.

Courses

Program matrix

Check current availability of courses [14] for this program.

| 1. Required Courses: (20.0 credits) | Credits |
|-------------------------------------|---------|
| | |

| | | |
|--|--|----------------|
| COMP 1002 [15] | Applied Computer Concepts | 3.0 |
| COMP 2629 [17] | Enterprise Networking Fundamentals | 4.0 |
| COMP 2766 [19] | Introduction to Linux | 4.0 |
| COMP 3677 [21] | Introduction to MS Server Administration Part 1 | 1.5 |
| COMP 3681 [23] | Microsoft Windows Server Administration Part 2 | 1.5 |
| COMP 3704 [25] | Applied IT Security Fundamentals | 3.0 |
| COMP 4912 [27] | Applied Virtual Networks | 3.0 |
| 2. Complete 3.0 credits from the following list of electives: | | Credits |
| COMP 2767 [29] | Linux Administration | 3.0 |
| COMP 3771 [31] | MS PowerShell Scripting | 3.0 |
| COMP 4704 [33] | Applied Network Security | 3.0 |
| Total Credits: | | 23.0 |

Check [current availability of courses \[35\]](#) for this program.

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 \[36\]](#) to find out.

Program Details

ANAD is course by course registration and was not designed for students on limited timelines. Due to prerequisites and scheduling, this program could take 5-6 terms to complete, depending on the term started and elective chosen.

Due to prerequisites and scheduling it is typically not possible to complete this part-time program in less than 4 terms, at night and on weekends.

Note: Flexible Learning was not designed for full-time delivery or for those on funding timelines.

Registration is course by course, each course has specific prerequisites, and some courses are only offered once per year.

[COMP 2629 – Enterprise Networking Fundamentals \[37\]](#) is only offered once a year in April or September and requires COMP 1002.

[COMP 2767 – Linux Administration \[38\]](#) is under review and not currently offered.

[COMP 4704 – Applied Network Security \[39\]](#) is under review and not currently offered.

[COMP 4912 – Applied Virtual Networks \[40\]](#) is only offered once per year in January, and is typically the last course in the program for most students.

After a foundation of data communication and network theory, hands-on labs are used to set up, install and administer network servers. Students learn how to implement administrative policies, security measures and develop plans for disaster recovery. Introduction to Linux and MS Windows Server Administration are required courses.

The ANAD program is currently 23 credits and must be completed within a 5 year period.

Some core and elective courses are also in the Flexible Learning [Computer Systems Diploma \[41\]](#)

Industry certification

Students are taught many of the topics covered in the CompTIA Net+, Linux LPI, Microsoft Server MCP, and CompTIA Security+ exams, which are available through third parties for additional fees*.

Please note that the focus of these related COMP courses is to gain hands-on experience.

Electives

Elective courses provide options to understand multiple technologies,

**Industry exams are independent of BCIT credentials. These exams may be purchased for additional costs, from various third parties.*

Students will also require additional preparation and studying in order to pass these industry certification exams.

Computer hardware and Internet requirements

Students must provide a current model PC desktop or laptop with a webcam, microphone and have high-speed internet access. COMP courses may use two-way audio and video as well as group work outside of class.

WARNING: Using your only or work-related PC is not a good idea as systems and data could be erased. Multiple computers are required as operating systems are installed and configurations are changed. Please have additional computers to use for installing operating systems and changing configurations during this program.

BCIT curriculum may be modified in accordance with market trends in the industry.

Grading

Students will receive a grade for each course based on the listed competencies. In most cases, each course carries a mark for individual work. Several courses require team work as well as an individual test. Assignments and exams will be used in the evaluation of students.

Program delivery

In person: This program is delivered on campus.

Program location

Burnaby Campus [42]

3700 Willingdon Avenue
Burnaby, BC

Downtown Campus [43]

555 Seymour Street
Vancouver, BC

Program abandonment

- Students approved for a Flexible Learning (Part-time Studies) program are expected to register and complete courses on a continuous basis.
- A student that has not completed a course from their approved program of study over a period of three consecutive academic terms will be considered to have abandoned the program.
- Throughout the duration of the program, a student is permitted a maximum of five academic terms where they are not required to register and complete a course from their approved program of study. Students who exceed the five term maximum will be considered to have abandoned the program.
- Students who have abandoned their approved program of study and wish to be reinstated will be required to apply for program approval for a current credential. BCIT cannot guarantee that courses taken prior to this reapplication will be credited towards the current credential.

BCIT Policy 5103 - Student Evaluation [PDF]. [44], permits a maximum of three attempts to successfully complete each course within a credential.

Graduating & Jobs

Graduates of this program are able to evaluate, integrate, set-up and administer current technologies for secure enterprise network solutions.

Graduate outcome survey highlight

100% of grads were satisfied with quality of instruction [45]. [PDF]

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 \[46\]](#) website.

To view these results, you may need to have the [Adobe Acrobat Reader \[47\]](#) installed in your Web browser.

- [Applied Network Administration and Design \[48\]](#)

Apply for graduation

Upon successful completion of all program requirements, complete an [Application for BCIT Credential \[PDF\] \[49\]](#) and submit it to Student Information and Enrolment Services.

Allow approximately six to eight weeks for processing.

All financial obligations to the Institute must be met prior to issuance of any credential.

Faculty, Advisors & Staff

BCIT Computing, Flexible Learning networking courses are delivered by subject matter experts who work in the field as IT professionals.

Several of our instructors are graduates of BCIT's Computer Systems Technology, CST Diploma or Degree and have work-related experience in their field.

Advisory committee

This associate certificate was developed by **Kevin Cudihee** – Program Head for Computing Flexible Learning, in conjunction with subject matter experts: Farshad Abasi, Fraser Robertson, Yves Shema, Steve Overland, Steven Ng, Rouzbeh Keshavarz, Dawood Sajjadi, and Edison Sie.

Contact Us

Programs and courses are subject to change without notice.

List of links found on this page

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- [1] <https://www.bcit.ca/programs/applied-network-administration-and-design-associate-certificate-part-time-5515acert/#courses>
- [2] <https://www.youtube.com/watch?v=mqCFtC9H2IU>
- [3] https://www.youtube.com/watch?v=CKl8mhU_eR0
- [4] <https://www.bcit.ca/programs/applied-network-administration-and-design-associate-certificate-part-time-5515acert/#details>
- [5] <https://www.bcit.ca/programs/applied-network-administration-and-design-associate-certificate-part-time-5515acert/#entry>
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- [7] <https://www.bcit.ca/study/courses/comp1002>
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- [10] <https://www.bcit.ca/international-applicants/>
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- [14] <https://www.bcit.ca/courses/comp1002,comp2629,comp2766,comp2767,comp3677,comp3681,comp3704,comp3771,comp4704,comp4912/>
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- [24] <https://www.bcit.ca/outlines/comp3681/>

- [25] <https://www.bcit.ca/courses/applied-it-security-fundamentals-comp-3704/>
- [26] <https://www.bcit.ca/outlines/comp3704/>
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- [34] <https://www.bcit.ca/outlines/comp4704/>
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- [36] <https://www.bcit.ca/admission/entrance-requirements/transfer-credit/>
- [37] <https://www.bcit.ca/courses/enterprise-networking-fundamentals-comp-2629/>
- [38] <https://www.bcit.ca/study/courses/comp2767>
- [39] <https://www.bcit.ca/study/courses/comp4704>
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- [41] <https://www.bcit.ca/programs/computer-systems-diploma-part-time-5500pdiplt/>
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- [52] <https://secure.bcit.ca/sis/apply/>