

Archived: September 9, 2021

## **Trades and Applied Technology Programs**

# **Information Technology and Applied Systems - Systems Administration and Networking Diploma**

**Location Offered:**

Nanaimo

**Credential:**

Diploma

**Program Length:**

2 Years

## **The Program**

The ITAS - Systems Administration and Networking program prepares students for careers in the design, installation, operation, and administration of network and Internet-based information systems. The program combines rigorous theoretical and technical education with hands-on, project-based learning. Using the most up-to-date curriculum, the ITAS program develops a student's technical skills, as well as teamwork, communications, and project management skills that align with VIU's graduation attributes, to satisfy industry demands for well-rounded, highly employable technology graduates.

The program will cover modern IT systems administration skill sets and set up students for careers in the implementation and management of Information Technology hardware, networks, operating systems, cybersecurity and virtualized cloud computing.

ITAS - Systems Administration and Networking is offered as a two-year diploma program. The program consists of two 4-month terms per year, plus a one month practicum work experience session at the end of the first academic year.

The first year of the program provides students with a solid foundation in Information Technology hardware, Windows and Linux client and server operating systems, wired and wireless networking and project management.

In the second year of the program, students will install, configure, and administer a wide variety of Information Technology services such as Active Directory, E-mail, web site servers, cloud and virtualized systems, network routing and switching, and cybersecurity best practices, in a mix of Linux, VMware and Windows Server environments. Second year graduates receive a diploma in Information Technology and Applied Systems - Systems Administration and Networking.

## **Program Outline**

<b>Year 1</b>	<b>Credits</b>
ITAS 141 - (Windows Server Management I)	4
ITAS 164 - (Information Technology Project Management Essentials)	4
ITAS 166 - (Virtualization and Cloud Computing I)	4
ITAS 167 - (Applied Operating Systems)	4
ITAS 175 - (Network Infrastructure Fundamentals)	4
ITAS 181 - (Linux Server Management I)	4
ITAS 185 - (Introduction to Programming Concepts)	4
ITAS 191 - (Introduction to Web Design)	4
ITAS 195T - (Practicum)	4
<b>Total Credits</b>	<b>36</b>

<b>Year 2</b>	<b>Credits</b>
ITAS 292 - (Information Technology Cybersecurity)	4
ITAS 241 - (Windows Server Management II)	4
ITAS 242 - (Windows Server Management III)	4
ITAS 267 - (Virtualization and Cloud Computing II)	4
ITAS 281 - (Linux Server Management II)	4
ITAS 288 - (Database Administration and Design)	4
ITAS 295 - (Network Routing and Switching Essentials I)	4
ITAS 296 - (Network Routing and Switching Essentials II)	4
<b>Total Credits</b>	<b>32</b>

*All program courses must be successfully completed before certificates will be issued.*

## Completion Requirements

Students should expect to spend 20 hours a week in the classroom, and an additional 15 - 20 hours per week on homework and assignments. Students must pass all courses and obtain a "C+" average in each term to be eligible to continue in the program and/or to receive an ITAS credential.

## Admission Requirements

- General admission requirements apply.
- Letter of application describing reasons for wanting to take the program (500 - 1,000 words). Include name and contact information, including email. A handout is available outlining the required content of application letter - see the Admissions Department, or email the Department Chair (see below).
- Interview.

### ***Recommendations for Admission***

- One of Principles of Mathematics 12, Applications of Mathematics 12, or Foundations of Mathematics 12.
- Two years' previous experience with computers, including experience installing and maintaining operating systems, and using office productivity software.
- ICT 11 & 12 (High School Info Tech).

### ***Notes on Admission***

- This program is open to full-time students only.
- Interview will only be granted after all other admission requirements are met.

- Students must supply their own computer system—see Program Fees.
- Consideration will be given to mature students without Grade 12; however, they must complete all prerequisites or equivalents.

## **Career Opportunities**

Graduates of the ITAS program will be qualified to work for:

- Internet service providers,
- Network design, installation, and support companies,
- Web development and web-hosting companies,
- Private and public educational institutes and training centres,
- Computer retailers and systems integrators,
- Most companies that use computers, computer networks, and the internet to carry out their business operations.

## **Contact**

For more information please contact the Department Chair by emailing [info@itas.ca](mailto:info@itas.ca). For information about registering and late applications, contact Melanie Cousins at 250-753-3245, Ext. 2282, or by emailing: [Melanie.Cousins@viu.ca](mailto:Melanie.Cousins@viu.ca).

## **Start Date and Application Deadline**

The program starts in September. Applications are accepted between the first business day in October and March 31.

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