

# Fundamentals of Virtual Containers

Microcredential Part-time [School of Energy](#).

## Overview

Delivery: distance. [See details](#).

## About the program

The Fundamentals of Virtual Containers Microcredential program is focused on containerization technologies and orchestration systems. It covers the basics of creating and managing containerized applications — emphasizing scalable, cloud-native technologies. Participants will learn about container orchestration tools, which are essential for managing complex applications and services in a distributed and scalable environment. This includes understanding how to deploy, scale, and manage containerized applications across multiple nodes in a cloud environment.

## Who it's for

This microcredential is suitable for IT professionals, system administrators, and those involved in DevOps roles who are interested in learning about containerization and orchestration. It's ideal for those who are new to these technologies as well as for professionals seeking to enhance their skills in managing modern, scalable applications. The course is designed to bridge the gap between development and operations, making it a valuable resource for anyone looking to improve their expertise in efficient and scalable application deployment.

## What grads can do

Upon completion of this microcredential, students can apply for skilled IT positions managing and creating containerized applications.

## Entrance Requirements

### Application processing

Ongoing throughout the year.

### Recommended for success

Although no previous experience is necessary, applicants should have basic knowledge of Linux and Networking.

### International applicants

This program is available to international applicants who will complete the program from outside Canada or who currently have a [valid status in Canada \[1\]](#), other than study permit. International applicants accepted into this program are not eligible for a study permit.

### Apply to program

Formal application to the microcredential is not required. Upon successful completion of the [courses](#), email the [program contact](#) with your full name, student number, and mailing address to be issued a microcredential.

## Scheduled Intakes

Ongoing Flexible Learning (Part-time Studies) intakes: [January, April, and September](#). [2]

## Costs & Supplies

### Tuition fees

Flexible Learning (Part-time Studies) tuition is charged on a course-by-course basis. Please see the [Flexible Learning Tuition & Fees](#) [3] page for more information on domestic and international tuitions.

### Books & supplies

Study material will be supplied by the instructor.

## Courses

### Program matrix

Check [current availability of courses](#) [4] for this program.

| Required Courses:   | Credits    |
|---|------------|
| <a href="#">CITX 1010</a> [5] <b>Introduction to Containerization</b>   | 1.5        |
| <a href="#">CITX 1020</a> [7] <b>Advanced Containerization Concepts</b> | 1.5        |
|   |            |
| <b>Total Credits:</b>   | <b>3.0</b> |

Check [current availability of courses](#) [9] 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](#) [10] to find out.

## Program Details

### Program length

This self-paced microcredential can be completed in one year.

## Grading

Minimum passing grade for each course is 50%.

## Program delivery

Online: This program is delivered fully online.

## Program location

[Online Learning.\[11\]](#)

## Graduating & Jobs

### Job opportunities

Graduates may qualify for several entry-level and intermediate job roles in the IT and DevOps fields, depending on their existing education and experience in IT. The specific job outcomes may include:

- Junior DevOps Engineer: This role involves working on development and operations processes, particularly in automating and streamlining the software development life cycle. A foundational understanding of containerization is a key asset in this role.
- System Administrator with a Containerization Focus: These professionals manage and maintain IT systems, and with containerization training, they would be equipped to handle systems that deploy applications in containerized environments.
- Technical Support Specialist in Container Technologies: In this role, individuals provide support for containerized applications and infrastructure, troubleshooting and resolving issues related to container deployment and management.
- Cloud Support Technician: This position entails supporting cloud-based applications and services, where knowledge of containerization can be crucial for managing scalable, distributed applications.
- IT Operations Analyst: Focusing on monitoring and supporting IT infrastructure, this role benefits from an understanding of containerization for optimizing operational processes.
- Application Support Analyst for Containerized Applications: Professionals in this role support the operation and maintenance of applications, with a special focus on those deployed in containerized environments.

## Faculty, Advisors & Staff

### Faculty

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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/international-students/permits-visas-status/status-in-canada/>
- [2] <https://www.bcit.ca/flexible-learning/part-time-courses-programs/flexible-learning-key-registration-dates/>
- [3] <https://www.bcit.ca/admission/tuition-fees/flexible-learning/>
- [4] <https://www.bcit.ca/courses/citx1010,citx1020/>
- [5] <https://www.bcit.ca/courses/introduction-to-containerization-citx-1010/>
- [6] <https://www.bcit.ca/outlines/citx1010/>
- [7] <https://www.bcit.ca/courses/advanced-containerization-concepts-citx-1020/>
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