



# Computer Systems Administration – CIST 101

## Computer Information Systems Technology Program

### Course Outline

COURSE IMPLEMENTATION DATE: September 2024  
OUTLINE EFFECTIVE DATE: September 2024  
COURSE OUTLINE REVIEW DATE: March 2029

---

#### GENERAL COURSE DESCRIPTION:

This course introduces students to the computer (PC) as a system, both hardware and software. Students learn PC hardware and peripheral components: their role, how to connect, install, configure, and troubleshoot issues. This also includes basic safety and operational procedures. For software, students will gain knowledge of the fundamentals of Operating Systems (OS). They will acquire the skills needed to install and configure desktop computers and other devices in a business environment. Topics include OS architecture, file and disk management, BIOS and UEFI, multi-boot, virtual machines, software installation/removal, performance tuning, backing up and protecting data, and troubleshooting. The basics of networking, security, virus protection, and firewalls are also covered. Students will be introduced to the basics of other major OS such as Linux and Apple's iOS. Theoretical knowledge will cover the Microsoft 70-698 Installing and Configuring Windows 10 course.

---

**Program Information:** This course is required for the first year of the Computer Information Systems Technology program.

---

**Delivery:** This program is delivered hybrid (includes both face-to-face and online components).

**COTR Credits:** 4

**Hours for this course:** 80 hours

#### Typical Structure of Instructional Hours:

Instructional Activity	Duration
Lecture Hours	40
Seminars / Tutorials	
Laboratory / Studio Hours	40
Practicum / Field Experience	
Other Contact Hours	
<b>Total</b>	<b>80</b>

#### Practicum Hours (if applicable):

Type of Practicum	Duration
On-the-Job Experience	
Formal Work Experience	
Other	
<b>Total</b>	<b>N/A</b>

**Course Outline Author or Contact:**

Chizoba Anoliefo, BSc, MEng

\_\_\_\_\_  
Signature

---

**APPROVAL SIGNATURES:**

Department Head  
Joy Brown  
E-mail: [jbrown3@cotr.bc.ca](mailto:jbrown3@cotr.bc.ca)

Dean of Trades and Technology  
Dr. Jack Moes  
E-mail: [jmoes@cotr.bc.ca](mailto:jmoes@cotr.bc.ca)

\_\_\_\_\_  
Department Head Signature

\_\_\_\_\_  
Dean Signature

EDCO

Valid from: September 2024 – March 2029

\_\_\_\_\_  
Education Council Approval Date

---

**COURSE PREREQUISITES AND TRANSFER CREDIT:**

**Prerequisites:** Admission to the Computer Information Systems Technology Diploma Program

**Corequisites:** None

**Flexible Assessment (FA):**

Credit can be awarded for this course through FA  Yes  No

Learners may request formal recognition for flexible assessment at the College of the Rockies through one or more of the following processes: External Evaluation, Worksite Assessment, Demonstration, Standardized Test, Self-assessment, Interview, Products/Portfolio, Challenge Exam. Contact an Education Advisor for more information.

**Transfer Credit:** For transfer information within British Columbia, Alberta and other institutions, please visit <http://www.cotr.bc.ca/Transfer>.

Student should also contact an academic advisor at the institution where they want transfer credit.

**Prior Course Number:** N/A

---

## **Textbooks and Required Resources:**

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

COMPTIA A+ Certification All-in-One Exam Guide, 11<sup>th</sup> Edition

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

---

## **LEARNING OUTCOMES:**

Upon the successful completion of this course, students will be able to

- explain the fundamentals of operating systems;
  - install and configure desktop computers, their peripherals, operating systems (Windows, Apple, and Linux);
  - practice the maintenance of hardware;
  - configure security settings to safeguard systems and data;
  - use recovery features to restore OS systems to a previous state;
  - perform system, file, and disk management tasks, including the configuration of storage, data access, and efficient data organization;
  - establish and manage a multi-boot system for diverse operating environments; and
  - configure settings and services to enhance computer operations that optimize performance.
- 

## **COURSE TOPICS:**

- Computer hardware components
- Operational and safety procedures
- Operating system
- Operation system configuration
- Storage and data access
- Application management
- Security setting
- Linux desktop operating system
- Apple desktop operating system
- Computer network and firewall configuration

*See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.*

---

## EVALUATION AND ASSESSMENT (Face-to-Face Delivery):

Assignments	% of Total Grade
Assignments (x4)	40%
Midterm Exam	30%
Final Exam	<u>30%</u>
Total	100%

Please see the instructor's syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.

---

### EXAM POLICY:

Students must attend all required scheduled exams that make up a final grade at the appointed time and place.

Individual instructors may accommodate for illness or personal crisis. Additional accommodation will not be made unless a written request is sent to and approved by the appropriate Department Head prior to the scheduled exam.

Any student who misses a scheduled exam without approval will be given a grade of "0" for the exam.

---

### COURSE GRADE:

Course grades are assigned as follows:

Grade	A+	A	A-	B+	B	B-	C+	C	C-	D	F
Mark (Percent)	≥ 90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	< 50

A grade of "D" grants credit but may not be sufficient as a prerequisite for sequential courses.

---

### ACADEMIC POLICIES:

See [www.cotr.bc.ca/policies](http://www.cotr.bc.ca/policies) for general college policies related to course activities, including grade appeals, cheating and plagiarism.

---

### COURSE CHANGES:

Information contained in course outlines is correct at the time of publication. Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment and marketing needs. The instructor endeavours to provide notice of changes to students as soon as possible. The instructor reserves the right to add or delete material from courses.