# **Computer Information Technology (CIT) Program**

## Bring Your Own Device (BYOD): September 2023 Computer Specifications







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**Bring Your Own Device (BYOD) at BCIT** is an initiative that enables BCIT students to access campus computing resources at any time through their own devices and to use their own computers for course work. The CIT Diploma program in the Department of Computing is a participant in this program, and requires each student have their own laptop computer and be able to bring it to school each day when on-campus instruction takes place.

#### **BYOD Computing Device Requirements for CIT Diploma**

All incoming Level 1 students must provide their own laptop for remote and classroom use that meet or exceed the minimum requirements listed below.

Processor	4 or More Cores	CIT commonly uses multiple virtual machines that require running on different cores.
Display	13" Screen or Larger Full HD Resolution (1920x1080) or Higher	Course work involves both creating content and reading documentation at the same time. Being able to simultaneously view both types of windows is possible on a monitor of sufficient size and resolution. Additionally, a secondary monitor is recommended if possible.
Memory	16GB or more RAM	Course work requires sufficient memory to run multiple concurrent virtual machines and memory intensive workloads.
Storage	500GB SSD (connected via SATA or NVMe)	CIT requires sufficient storage to quickly access large files, databases and virtual machines are common examples.
Networking	Wi-Fi 4 or Newer Wireless Network Adapter	On campus activities require network connectivity, primarily provided in the form of WIFI access.
	Gigabit Ethernet Port (possible via USB adapter)	There are several courses that require wired network connectivity for performance and educational reasons.
Ports	USB A and C ports (possible via adapter)	It is sometimes necessary to connect peripherals when doing CIT course work.
	HDMI (possible via USB adapter)	On campus presentation equipment is connected to using HDMI.
Multimedia	Headphones / Earbuds, Microphone, Camera	These are required to participate in remote and flipped course activities.
Keyboard	Full Hardware Keyboard	You will be creating content and not just consuming it. Computers without keyboards are not suitable for this purpose.
Operating System	Windows 10 Pro or Windows 11 Pro	

#### **Operating System**

The CIT program officially use the Windows platform as a teaching environment. Windows 10 Pro or newer is required. While Mac and Linux operating systems are acceptable for many courses, they may present challenges in courses that focus on the installation, administration, and configuration of MS Windows. The use of alternate operating systems is not supported.

CIT students have access to free educational licenses for most Microsoft software and do not need to purchase Windows 10 / 11 if using a laptop that meets the minimum specifications but has an older version of Windows. Once classes start, students will have access to a copy of Windows 10 or 11 which they can install on an existing computer.

#### Software Installation and Computer Usage

It is imperative that each student have their own dedicated computer that is not borrowed or shared, as the computer will be needed daily in all courses as well as for assignments outside of class time.

Students must have Administrative privileges on the computer, and therefore a laptop that is managed by a third party (an employer, for example) will not be suitable as you will be installing and managing the software on your machine.

It is possible for files and applications to be deleted. Students will be instructed on proper procedures for backup and restoration; however, it is advisable to avoid using a computer that is relied on for external activities which would be negatively impacted by data loss (such as a work or family computer).

#### **Internet Connectivity**

CIT is an on-campus program that incorporates flipped course materials. A "flipped" model means that activities like lectures are delivered online, sometimes in a video format and outside of scheduled class time. Additionally, homework activities can require hands-on practice. In order to participate in these activities, you will require a reliable Internet connection with a minimum of 15 Mbps download and 2 Mbps upload.

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### FAQs

#### Can I use a less capable computer?

- > The CIT program strongly recommends that you purchase a computer that meets at least the device requirements outlined above. A slower and less capable device will slow down and perhaps even block your ability to complete course assignments.
- > The CIT program is a professional program we strongly recommend that students acquire professional tools for the best experience in the program.

#### Can I use a tablet instead of a laptop?

> No. Tablet computers are consumption devices. As students will be creating content, tablet computers without keyboards (iPads, Android devices, Surface devices) are not suitable for this program.

I have to carry my computer on transit, and I would like to carry a smaller one. How will this impact my learning?

BCIT Computing courses often require students to work simultaneously in various applications. While this
is possible on any number of screen sizes, it is optimal if students have as large a screen as practical.
Additionally, your instructors need to be able to see your work on screen to provide feedback and advice.
This can be challenging for smaller screen and font sizes, as they are further from the screen than you
are.

#### You did not recommend CPU type or speed. Is there a minimum?

> For the types of work you will be doing, performance is most likely limited by drive I/O (SSD recommended), RAM (more is better) and network speed (throughput). Any consumer PC which meets the specifications listed above will have a processor that is adequate.

#### Do I need a new computer - or can I bring a previously used one?

A used computer is perfectly fine as long as it meets the minimum specifications and is in working order.
 However, it is recommended to completely wipe and reformat the hard drive before beginning the program, as old software can cause problems.

#### Do I need a laptop with a touch screen?

> No, a touch screen is not required for the CIT program.

#### Is there a preferred brand, model – or recommended computer store?

Students come with pretty much every brand and model you can imagine. In the past, the only students who have had difficulties are those who showed up with old "used and abused" laptops, or with laptops that did not meet the recommended specifications – including the Operation System. We have seen it all, from broken screens to keys that don't work to batteries that won't hold a charge to fans that no longer spin.

You are training to work in computing, and the computer will be your primary tool for learning during your time in, and after, the CIT program. Investing in a quality unit that meets or exceeds the recommended specifications will serve you well.

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