

Computer Information Technology

Bring Your Own Device (BYOD): September 2021 Computer Specifications







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 premises instruction resumes.

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 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 windows is possible on a monitor of sufficient size and resolution. Additionally, a secondary monitor is recommended when possible.
Memory	16GB 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	802.11n or 802.11ac Wireless Network Adapter	On campus activities require network connectivity, primarily provided in the form of WIFI access.
	Gigabit Ethernet Port and Ethernet cable	There are several courses that require wired network connectivity for performance and educational reasons.
Ports	USB	It is sometimes necessary to connect peripherals when doing CIT course work.
	HDMI (or via adapter)	On campus presentation equipment is connected to using HDMI
Remote Learning	Headphones / Earbuds	These are required to participate in remote and flipped course
	Microphone	activities
	Camera	
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	

Operating System

The CIT program officially use the Windows 10 platform as a teaching environment. 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 ability to use alternate operating systems is not guaranteed and varies from course to course.

CIT students have access to free educational licenses for most Microsoft software and do not need to purchase Windows 10 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 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 will be running online in September 2021 and always 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. Class sessions, whether online or in person are used for 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.



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.

SSD costs a lot more than HDD. Why do you recommend SSD?

> SSD is highly recommended for the performance increase. 500GB SSD will add to cost, but best performance increases for non-graphics applications will come from SSD and additional RAM.

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 (card 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. 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.

