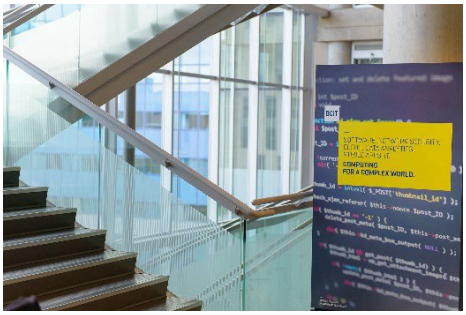
BScACS (Bachelor of Science in Applied Computer Science)

Bring Your Own Device (BYOD): Fall 2025 Laptop 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 BScACS program in the Department of Computing is a participant in this program and requires each student to bring their own laptop computer to school each day.

Using their laptops, students can run applications locally or securely connect through a web browser to a BCIT managed "virtual desktop" where computing applications for courses will be available for the duration of their study period. This virtual desktop can be accessed both on campus and remotely. The virtual desktop may be used for instruction purposes in some courses.

BYOD Computing Device Requirements for BScACS

All incoming Level 5 students must provide their own computing devices for classroom use that meet or exceed the minimum requirements listed below. A web browser will be used to access a virtual desktop interface where students will run BCIT-provided software applications for specific courses. Both PC and Mac devices are acceptable.

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

Minimum requirements for at-home connectivity:

- A reliable high-speed internet connection with at least 100 Mbps (up/down) bandwidth

Minimum requirements for all devices:

- Laptop computer with integrated keyboard and a 15-17" screen (13–14" is acceptable but larger is better); FHD (1920x1280)
- A laptop that can hold sufficient charge to last you through a 3-hour class at a stretch and/or with access to a power bank.
- 16GB RAM
- 512GB SSD
- Wi-Fi wireless networking
- Current Chrome or Safari or Firefox web browser installed
- Headphones (earbuds or Air Pods are fine) for watching tutorial videos in class
- Built-in microphone (laptop or compatible headphones) for online meetings.

- Built-in camera, speakers, and Bluetooth
- Power cord for recharging
- A protective sleeve or case

For PC:

- Two or more USB ports
- HDMI port
- Windows 11 Operating System, 64-bit version of Pro/Enterprise/Education*

* BCIT students have access to free educational licenses for most Microsoft software and do not need to purchase Windows operating system 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 11 which they can install on an existing computer.

For Mac:

- Intel CPU or Mac M-series, with dual boot or other Windows virtualization software
    - **NOTE:** For windows virtualization support please refer to the FAQ Section at the end of this document. **Access to a windows environment is required for all BSc students.**
- OS 10.14 or above*
- Thunderbolt/USB adapters and HDMI cable

* Students at the downtown campus should note that macOS Catalina (10.15) has removed support for 32-bit applications. The display systems at BCIT's downtown campus require an HDMI cable to connect to the overhead display system until the vendor updates their software to 64-bit.

Optional suggestions to make your life easier:

- Any smartphone (Android or iPhone), for testing mobile applications.
- A second/dual monitor, for any at-home learning and work
- Additional RAM above 16GB will have a positive impact on performance

The above minimum requirements will allow students to remotely access and run BCIT-provided software applications as well as install and manage multiple virtual operating systems on their own laptops.

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 should have administrative privileges on the computer, and therefore a laptop that is managed by a third party (an employer, for example) would not be suitable.

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).

FAQs

Do I need a computer on the very first day?

> Yes, and every day after that.

Can I use a less capable computer?

> We do not recommend it. You must be able to meet all assessment requirements, including those for timed online exams with submission deadlines. Slow response times and slow performance will impact your ability to perform well in this program.

I have a Macbook (M-series or Intel). Is that ok?

> Please note that if you are bringing a MacBook device then you are responsible for ensuring that you have access to a Windows environment in case your class requires one.
>
> One possibility for this is to install VMWare. For information about obtaining and installing VMWare please see the following Knowledge Base articles from BCIT IT Services.:
>
> - https://kb.bcit.ca/student/accessing-bcits-vmware-student-store-3021/
> - https://kb.bcit.ca/student/windows-on-mac-computer-3025/
>
> You may also use Parallels for Windows virtualization, but this product is not provided free from BCIT - students can source their own license at full retail if they prefer this product.

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

> SSD is highly recommended for the performance increase. 512GB SSD will add to cost, but best performance increases for non-graphics applications will come from SSD and additional RAM. The program preference is a 256GB SSD over a 512GB spinning drive (HDD). You can add an external drive for storage if you require more space.

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, please be sure to completely wipe and reformat the hard drive before beginning the program, as old software can cause problems.

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

> We do not recommend a preferred brand, model, or 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 very old and outdated 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 and fans that no longer spin.

FAQs continued

Can I use a tablet instead of a laptop?

> No. As students will be creating content, tablet computers without keyboards (iPads, Android devices, Surface devices) are not suitable for this program. Additionally, we cannot guarantee that the software you will be required to use is supported on a tablet.

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 is 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.

Do I need a laptop with a touch screen?

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