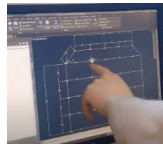


Civil Engineering

Bring Your Own Device



Bring Your Own Device (BYOD) at BCIT is an initiative that allows you as a registered BCIT student to access campus computing resources at any time through your own device. This virtual desktop can be accessed both on campus and remotely, and will be used for instruction purposes in some courses. No additional software will need to be installed on your computing device.

BYOD Computing Device Requirements for Civil Engineering

As a Civil Engineering student, you must provide your own computing device for classroom use that meets or exceeds the minimum requirements listed below. Your device's web browser will be used to access a virtual desktop interface (called BCIT [Workspace](#)) where you will remotely run BCIT-provided software applications for specific courses. Note that in some cases there are student versions of the software available that you may prefer to install on your device. This may require a device exceeding the requirements below (see page 2 of this document).

Minimum device requirements:	
■ Operating system: Windows 10 ¹	■ Processor: Intel i5 Processor or AMD Equivalent
■ Memory: 8 GB or greater	■ Hard Drive: 250 GB SSD and 500 GB HDD
■ Graphics Card: Nvidia MX250 or equivalent/better	■ Screen: 13" or larger with at least 1920 x 1080 resolution ²
■ Connectivity: 802.11n or newer/LAN	■ Keyboard: Integrated keyboard ³
■ Battery: Recommended: 2-hour or greater battery life	■ Warranty: We recommend that you add a warranty with accidental damage coverage.
■ Power cord for recharging	■ Current Chrome/Safari/Firefox installed web browser
Other mandatory accessories:	
<ul style="list-style-type: none"> ■ Web camera, speakers and microphone. These can be integrated into your device or purchased and installed separately. You will be participating in lectures, tutorials, labs, tests, group assignments and exams and a web camera, speakers, and microphone will be required. The ability to interact and communicate visually and verbally is necessary. Please consider a dedicated headset with microphone because it provides better quality sound for both you and the instructor. ■ Minimum high-speed internet of 10Mbps (megabits per second) ■ A stand-alone monitor(s) for viewing and editing files while participating in lectures and tutorials² ■ PDF scanning app 	

¹ BCIT Engineering programs use the Windows 10 platform as a teaching environment. In addition to Windows laptops, Mac operating systems are acceptable as BYOD devices but only for remote access via web browser to software applications. There are certain programs that have student versions available that cannot be installed locally on a Mac laptop.

² BCIT Civil Engineering courses make extensive use of AutoCAD and other Autodesk products. While AutoCAD will run on any number of screen sizes, it is optimal if students have as large a screen as practical, especially for the accessory stand-alone monitor.

³ Tablet computers are consumption devices. As a student you will be *creating* content and not just consuming it; tablet computers without keyboards (iPads, Android devices) are not well suited for this and are not recommended.

The above minimum requirements will allow you to access and remotely run BCIT-provided software applications without physically installing them on your own device. A good wireless card is more important than processor, RAM and hard drive requirements – these are less relevant as the computing resources are provided by BCIT for the virtual desktop and there is very little ‘work’ done by your endpoint device.

Some software applications used in Level 1 (1st year) of BCIT Civil Engineering

Adobe Acrobat Professional	AutoCAD
AutoCAD Civil 3D	Microsoft Office
Revit	

Some software applications used in later terms of BCIT Civil Engineering

Ensoft	MASTAN2	Rstudio
GeoStudio	Mathcad	SAP2000
HeavyBid	Microsoft Project	Synchro 10
HEC-RAS	PCSWMM	Transoft
Maple	Revit Structural	AutoTurn

Software titles and versions actually installed and available through the virtual desktop may differ from the list above.

Standalone software installation

You may optionally elect to purchase a more powerful computing device that exceeds the minimum requirements listed and would be capable of installing and running some of the above software applications natively (standalone) for use after you have completed your Civil Engineering program at BCIT. Windows based machines are optimal for this purpose as they match the delivery platform used by BCIT Civil Engineering. If you want to use a Mac operating system, you may find it necessary to install Windows emulation software to run certain applications.

If you plan on installing standalone software applications, you should research for yourself the hardware requirements necessary to accommodate some or all of the software indicated above. Some (not all) of these software applications have versions that are available free of charge to registered students. Note that as a BCIT Civil Engineering student, you will be able to install educational versions of Office 365 and other Microsoft products through a BCIT portal (Microsoft Windows, Microsoft Project, Microsoft Visio, and more).

Useful Links

If you would like to have the ability to natively run (i.e. standalone) software used in BCIT Civil Engineering on your own computer, please review and consider the following links before making any purchasing decisions:

- AutoCAD hardware <https://tinyurl.com/yajzmagu>
- Revit hardware <https://tinyurl.com/yb69cc38>