

BCIT Civil Engineering

Bring Your Own Device (BYOD)



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. Note that the software packages used in the Civil Engineering program are Microsoft Windows-centric. Execution of some software packages may prove challenging on a non-Windows device (e.g. Apple MacBook). In most cases, applications will be delivered using AppsAnywhere (AA), BCIT's academic software delivery platform. In some cases, there are student-install versions of software available that you may prefer to install on your device. Both cases may require a device exceeding the requirements below (see page 2 of this document).

Minimum device requirements:	
<ul style="list-style-type: none"> ■ Operating system: Windows 10 or 11¹ 	<ul style="list-style-type: none"> ■ Processor: Intel i5 minimum, Intel i7 or AMD Ryzen 5 recommended
<ul style="list-style-type: none"> ■ Memory: 8GB minimum, 16GB strongly recommended 	<ul style="list-style-type: none"> ■ Hard Drive: 500GB SSD or larger (HDD/Spinning disk not recommended)
<ul style="list-style-type: none"> ■ Graphics Card: Intel XE or AMD Radeon integrated graphics (Minimum) or dedicated graphics card with 4GB+ RAM (Recommended) 	<ul style="list-style-type: none"> ■ Screen: 13" or larger with at least 1920 x 1080 resolution²
<ul style="list-style-type: none"> ■ Connectivity: 802.11AC Minimum, 802.11AX or Wifi6 with 2x2 capability recommended 	<ul style="list-style-type: none"> ■ Keyboard: Integrated keyboard³
<ul style="list-style-type: none"> ■ Battery: Recommended: 2-hour or greater battery life 	<ul style="list-style-type: none"> ■ WIRELESS: supports 802.11n or 802.11ac, ideally with a 2x2-capable Wireless card
<ul style="list-style-type: none"> ■ Power cord for recharging 	<ul style="list-style-type: none"> ■ Current Chrome/Safari/Firefox installed web browser
Recommended accessories:	
<ul style="list-style-type: none"> ■ Web camera, speakers and microphone. These can be integrated into your device (preferred option) or purchased and installed separately. ■ A warranty with accidental damage coverage is recommended for your laptop. ■ Minimum high-speed internet of 10Mbps (megabits per second) ■ A stand-alone monitor(s) for viewing and editing files at home² ■ Computer mouse for ease of use, particularly when drafting in AutoCAD ■ PDF scanning mobile app 	

¹ BCIT Engineering programs use the Windows 10 platform as a teaching environment so **Macs are not recommended**. Usage of Macs will compromise the quality of the user experience and will result in a student not being able to stream Windows-only apps. In addition, 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 a 24" or 27" external monitor for home use. This can be more cost effective than purchasing a laptop with a larger screen.

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.



BYOD Computing Device Requirements for Civil Engineering Cont'd

The above minimum requirements will allow you to access and run BCIT-provided software applications. Because of the nature of the software used by the Civil Engineering program, computers that don't meet those requirements will likely provide a poor user experience.

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

Mathcad

Rstudio

GeoStudio

Microsoft Project

SAP2000

HeavyBid

PCSWMM

Synchro 10

HEC-RAS

Revit Structural

Transoft

Maple

AutoTurn

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).