Recommendations for Laptop Hardware + Software / ACADEMIC YEAR 2018-2019

Specifications – Laptop PC

Screen	15” or 17”
Processor	Intel i7 2.5GHz (2.8 GHz recommended) 64-bit Multi-Core processor minimum.
RAM Memory	16 GB minimum
Internal Hard Drive	1 TB minimum (an added external hard drive is recommended for backup)
Graphics Card	2 GB VRAM minimum (more memory and performance capability is recommended). MUST support the latest release of OpenGL.
Wireless Card	Built-in default wireless
DVD-CD ROM	Reads and writes DVDs and CDs (optional)
Operating System	Latest version of Windows 10 Professional
Monitor Output	HDMI (VGA adapter helpful)
Ethernet Cable	CAT 5 cable (6’– 10’ length)

Specifications – Laptop MAC

Screen	15” MacBook Pro Retina
Processor	Intel i7 2.5GHz (2.8 GHz recommended) 64-bit Multi-Core processor minimum.
RAM Memory	16 GB minimum
Internal Hard Drive	1 TB (an added external hard drive is recommended for backup)
Graphics Card	Radeon Pro 455 2GB (w/ the 460, 4GB is available for additional cost)
Wireless Card	Default
DVD-ROM & CD-ROM	Only available through purchase of external drive (Apple Super Drive)
Operating System	Latest Mac OS version + latest version of Windows 10 Professional
	You can use the Bootcamp utility (http://support.apple.com/kb/DL1721) or the Parallels Desktop application.
	(http://www.parallels.com/landingpage/pd/general/?utm_nooverride=1&src=r&gclid=CPLZiOiY7b4CFVQiMgoddg0AfQ)
	*** See Note to Mac Users below ***
Adapters	USB-C to HDMI, USB-C to VGA, and USB-C to USB-A — recommend ordering adapter dongles and cables from Monoprice.com

Software

Microsoft.-	Office: Word, Excel, Power Point. Free download available through webmail; or purchase through BSU Technology Store (www.bsu.edu/helpdesk/office)
Adobe.-	Adobe Creative: Photoshop, Illustrator, InDesign, Dreamweaver and Acrobat Pro. Available in the Technology Store through code for Adobe Creative Cloud
McNeel.-	Rhino 6.0, Educational Version: at the Ball State University Bookstore (also available at https://www.rhino3d.com/sales/north-america/United_States)
VLC Media Player.-	http://www.videolan.org/vlc/index.html (or similar for avi and .mov playback)
VPN.-	VPN (Off Site Secure Access): http://bbcrm.edusupportcenter.com/link/portal/8197/8382/ArticleFolder/608/VPN-Off-Site-Secure-Access http://cms.bsu.edu/about/administrativeoffices/securityservices/software/vpn
Antivirus Software	Microsoft Defender (included with Windows 10 installation)

Other additional software (i.e. plugins, and rendering engines) may be specified accordingly by instructors during the fall semester.

Storage

Students have access to 50 GB storage through Ball State University. Visit the following link to get started with BOX;
https://apps.bsu.edu/CommunicationsCenter/Story.aspx?CategoryID=158&MessageGuid=AD92B83F-3102-4887-8736-D5F33CA21523&OptIn=Y
https://ballstate.box.com
Additionally, a flash drive, burnable CDs and/or an external hard drive are recommended for backup.

Notes Regarding Use of Computers in CAP and Architecture Curricula and When to Buy a Laptop

The first course **requiring** a laptop with the above software is ARCH263, taken by architecture students in the fall of their second year. Prior to this, during the extent of the CAP first year, personal computers are not mandatory. During first year, students may use older laptops with basic functionality or use the computer labs in the university libraries for computer work. However, many students and parents may wish to purchase computers prior to first year. Those doing so should consider that these computer recommendations may change prior to the student's second year, but historically these revisions have been minor. Current retail trends for laptops indicate as well that computer capabilities will change very little from year to year while prices will continue to fall slightly for the same products. You may take this into consideration if you decide to make an early purchase.

Student Responsibility for Computers, Software, and Maintenance

It is the responsibility of the student to purchase, set up, and maintain their laptops and software required for their coursework. There are resources available on campus to assist students with computer-related technical issues; however students must take provisions to back up their work and seek out alternatives in the event that their computer fails, must be shipped for repair, is lost, or stolen. Specific computing policies are addressed individually by faculty in their respective syllabi.

Note to Mac users

Mac users are responsible for setting up and maintaining a configuration for running PC-only programs on their Macs. Rhino 3D modeling software as well as all Autodesk products (AutoCAD, 3ds MAX, etc.), among others, are PC/Windows native programs*. You may run them on a Mac using a special set up referred to as (1) Boot Camp that assigns part of a Mac computer's hard disk to host Windows operating system along with a separate file structure associated with it, or (2) Parallels Desktop application. Any of these options may demand a technically intensive setup that may be challenging to those unfamiliar with computers and software configuration —although on-campus resources are available to assist students with this procedure, students are advised to consider this point in the event that they elect to use Macs. Also note that Rhino and its plugins developers strongly suggest the use of Bootcamp over Parallels operating system. It is suggested that you research on the latest system recommendations for specific software applications.

*Note that while Rhino for Mac is available and is for the most part functionally equivalent to Rhino for Windows, its user interface differs significantly and many plugins, including Grasshopper, are not available for the Mac version. Instructors (and most instructional content found online) will use Rhino for Windows to teach/demonstrate its use.

Special questions or concerns may be forwarded to Chris Helms: cjhelms@bsu.edu