Recommendations for Laptop Hardware + Software  ACADEMIC YEAR 2020-2021

Specifications – PC Laptop (Note: Lenovo and Dell are supported by Ball State Technology Store)

Screen  15" - 17"
Processor  Intel i7 4.1GHz 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 are recommended. MUST support the latest release of OpenGL. NVIDIA graphics cards are recommended.
Wireless Card  Built-in wireless that supports 2.4Ghz and 5Ghz.
Operating System  Latest version of Windows 10 Professional.
Monitor Output  HDMI (VGA adapter helpful).
Webcam  Integrated and/or as external accessory.

Specifications – MAC Laptop (Note: Macs are supported by BSU Technology store)

Screen  16" MacBook Pro Retina (15" is okay, if still available).
Processor  Intel i7 2.6GHz 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  AMD Radeon Pro 5xxxM 4GB. MUST support the latest release of OpenGL. (see Note to Mac Users below)
Wireless Card  Built-in wireless that supports 2.4Ghz and 5Ghz.
Operating System  Latest Mac OS version + latest version of Windows 10 Professional.
You can use the Bootcamp utility (https://support.apple.com/boot-camp) or the Parallels Desktop application. (http://www.parallels.com/landingpage/pd/general/?utm_nooverride=1&src=r&gclid=CPLZiOiY7b4CFVQiMgoddg0AIQ)

Software

McNeel.- Rhino 6.0, Educational Version; best price is likely at the Ball State University Bookstore. Wait until first day of Arch 263 before purchasing.
VLC Media Player.- http://www.videolan.org/vlc/index.html (or similar for avi and .mov playback)
VPN.- VPN (Off Site Secure Access): https://bsu.service-now.com/helpdesk?id=kb_article&sys_id=f4dab96db1a7e401e8c3c8f9d961941
Antivirus Software  Microsoft Defender (included with Windows 10 installation)

Other additional software (i.e. plug-ins, 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://ballstate.box.com

Additionally, a flash drive and an external hard drive are recommended for backup and transferring files.

Regarding Use of Computers in CAP and Architecture Curricula and When to Buy a Laptop
PCs will likely be a better value for students buying a new machine (see ‘Note to Mac users’ below). The first course requiring a laptop with the above software is Arch 263, 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 during 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. Students must make 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, REVIT, 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, instructors may only use and support Rhino for Windows for teaching/demonstrations.

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