AB 226, R.W. ESTOPINAL COLLEGE OF ARCHITECTURE AND PLANNING
BALL STATE UNIVERSITY
765-285-1971

Minimum Performance-Based Specification for Student Computer Purchases

* First Year CAP students are *not* required to purchase a computer

Laptop Recommendations - PC

Screen	15.6" Ultra Sharp FHD/UHD/LED Panel
Processor	Intel Xeon or Core i7 (2.6GHz quad-core or better)
Memory	16GB RAM or more
System Graphics	4GB Graphics Memory (dedicated video RAM), minimum
Hard Drive	512GB Hard Drive (SSD strongly recommended)
Optical Drive	DVD Writer (optional)
Operating System	Windows 10 Pro (or most current) 64-bit
Ethernet	10/100/1000 Ethernet (optional, if available)
Wireless	Integrated 802.11ac + Bluetooth 4.2 (or better)
Printer	Optional

Laptop Recommendations - macOS

Screen	16" MacBook Pro
Processor	Intel Core i7 (2.6GHz quad-core or better)
Memory	16GB RAM or more
System Graphics	4GB Graphics Memory (dedicated video RAM)
Hard Drive	512GB Hard Drive (SSD strongly recommended)
Optical Drive	USB SuperDrive (or external DVD writer, optional)
Operating System	macOS Catalina (or most current)
Ethernet	10/100/1000 Ethernet (optional, if available)
Wireless	Integrated 802.11ac + Bluetooth 4.2 (or better)
Printer	Optional

Hardware and Software Recommendations*

Microsoft Office Professional (2019 or higher)
ESRI ArcGIS (most current version/update)***
Adobe Creative Cloud (InDesign, Photoshop, Illustrator, AcrobatPro, etc.)
CAD software: **Autodesk AutoCAD 2020 (or higher), *possibly* Vectorworks Landmark 2019+
3D Modeling software (Autodesk Revit, Civil 3D; SketchUp; Rhino; 3ds Max, etc.)**
Internet Access: Google Chrome, Mozilla Firefox, Microsoft Edge, etc.
Virus Protection: Norton Anti-Virus, or Sophos Endpoint (available free through BSU)
20' CAT6 RJ45 or better Ethernet/network cable (for faster wired internet connections)
Cable lock (targus defcon or similar; to secure your hardware when stationary)

Notes:

Suggested upgrades and other considerations:

• Increase system graphics memory if possible

• Upgrade processor and GHz speed if possible

• Increase internal hard drive capacity

• Increase memory (system RAM) if possible

• Increase screen size to 17" or larger to maximize display area for graphics & multi-tasking; decrease screen size to maximize portability

• USB 3.0 flash drive (256GB or larger)

• External hard drive (1TB+ SSD, USB pocket size)

• Web cam (integrated or external)

• Integrated mobile broadband (AT&T, Verizon, etc.)

• Extra laptop battery

• Touchscreen and/or pen-enabled tablet can be useful

• External monitor to maximize productivity (24"+)

• Purchase additional (3-4 years) warranty/service/support and accidental damage protection for your hardware.

• Mac users should consider purchasing Parallels Desktop (or similar) to also run PC-only applications.

Software available at the BSU Technology Store:

Windows 10 Operating System (±$32.00)

Adobe Creative Cloud (±$50.00/year)

Parallels Desktop 15 for Mac (±$40.00/year)

Anti-virus software and more (call for titles and pricing)

**Autodesk AutoCAD and Revit are available free to students @ https://www.autodesk.com/education/free-software/featured

**A variety of CAD options are available, each with differing 2D & 3D features/capabilities. AutoCAD and Revit are taught in our curriculum. However, students are welcome to explore and apply additional CAD, representation, and modeling tools which might best support their own design methods/interests.

***ESRI ArcGIS software available free through Bracken Library (GIS Research and Map Collection, 765-285-1097)

*Software applications are basic to the LA program, much like traditional course textbooks. Computers and software are available through the BSU Technology Store at significant discounts to students; please contact them for more information (Tech Center BL 103, https://www.bsu.edu/about/administrativeoffices/technologystore, techstore@bsu.edu, 765-285-4104). You may also contact BSU Unified Technology Support Tech Center (765-285-8324) for other technology-related inquiries. Computer manufacturers may offer good deals to students (e.g., discounts, financing, lease options). The following PC brands are and have been relatively common among our students and faculty: Dell, HP, Asus, Lenovo, Acer, MSi, Alienware. Please note that the Apple Macbook Pro will generally run most software emphasized in our program but some applications (e.g., ESRI ArcGIS, Autodesk Revit) only run on the Windows OS; this requires the installation & use of Bootcamp, Parallels Desktop, etc. to run those applications on the Mac OS.