Minimum Performance-Based Specification for Student Computer Purchases

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

<table>
<thead>
<tr>
<th>Laptop Recommendations - PC / Windows</th>
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<tbody>
<tr>
<td><strong>Screen</strong></td>
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<tr>
<td><strong>Processor</strong></td>
</tr>
<tr>
<td><strong>Memory</strong></td>
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<td><strong>System Graphics</strong></td>
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<td><strong>Hard Drive</strong></td>
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<th>Laptop Recommendations - Apple / macOS</th>
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<th>Hardware and Software Recommendations*</th>
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<tr>
<td><strong>Microsoft Office Professional (2020 or higher)</strong></td>
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<tr>
<td><strong>ESRI ArcGIS (most current version/update)</strong></td>
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<tr>
<td><strong>Adobe Creative Cloud (InDesign, Photoshop, Illustrator, AcrobatPro, etc.), latest versions</strong></td>
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<tr>
<td><strong>CAD software</strong>: <strong>Autodesk AutoCAD, latest version</strong></td>
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<tr>
<td><strong>3D Modeling (Autodesk Revit, Civil 3D; SketchUp; Rhino; 3ds Max, etc.), latest versions</strong></td>
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<tr>
<td><strong>Internet Search Engines</strong>: Google Chrome, Bing, Mozilla Firefox, Microsoft Edge, etc.</td>
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<tr>
<td><strong>Virus Protection</strong>: Norton 360 Deluxe or similar (consult Tech Center for advice)</td>
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<tr>
<td><strong>20' CAT6 RJ45 or better Ethernet/network cable</strong> (for faster wired internet connections)</td>
</tr>
<tr>
<td><strong>Cable lock (Targus Defcon or similar)</strong> to secure your hardware when stationary</td>
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</tbody>
</table>

*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.

**Suggested upgrades and other considerations:**
- Highly recommended: Pen-enabled tablet (e.g., Apple iPad, Microsoft Surface, or similar); a high-end 2-in-1 convertible touchscreen laptop could be a good all-in-one alternative to a regular PC laptop
- Increase system graphics memory if possible
- Upgrade processor and GHz speed if possible
- Increase internal hard drive capacity
- Increase memory (system RAM) if possible
- 17" or larger screen to maximize area for graphics & multi-tasking (may compromise portability)
- USB 3.0 flash drive (256GB or larger)
- External hard drive (1TB+ SSD, USB pocket size)
- Webcam (integrated or external)
- External monitor to maximize productivity (24"

Software available at the BSU Technology Store:
- Windows 10/11 Operating System (+$32.00)
- Adobe Creative Cloud (+$50.00/year)
- Parallels Desktop 16 for Mac (+$40.00/year)
- Norton 360 Deluxe (+$27.00)

CAD and GIS options:
- **Autodesk AutoCAD, Revit, Civil 3D, and 3ds Max 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 characteristics. AutoCAD, Revit, Rhino, and SketchUp are taught in our curriculum. 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)**