School of Architecture — Recommended Laptop Technical Specifications

Updated: Summer 2026

GENERAL NOTES

While we do not endorse a specific brand or model, the School of Architecture provides recommendations for minimum laptop technical specifications to ensure optimal performance for architecture-related software. As long as a device meets or is close to meeting the specifications, selecting a laptop ultimately comes down to individual preference and budget considerations.

Students are provided cloud storage through University **Box** and **Google Drive**; hard drive space on the laptop can be primarily for software. Students will also have access to virtual computers via **Illinois Anyware**, which functions as a virtual computer lab with powerful processing accessible through less powerful laptops. The University also provides physical computer labs on campus with the software needed for coursework.

HARDWARE: WINDOWS LAPTOPS

- **Processor (CPU):** Intel Core Ultra 7/9, 13th Gen+ i7/i9, or AMD Ryzen 7/9 (7000 series or newer).
- **Memory (RAM):** 32 GB DDR5 is recommended to handle complex Revit/Rhino files; 16 GB is the absolute minimum.
- **Graphics (GPU):** Dedicated NVIDIA RTX 4050, 4060, 5060, or 5070 with at least 6GB–8GB VRAM for rendering.
- **Storage:** 1 TB or 2 TB NVMe SSD for fast file loading.
- **Display:** 15–16 inch screen, 1920 × 1080 minimum, but 1440p (QHD) or 4K OLED preferred for detailed work.

HARDWARE: APPLE MACBOOK PRO

Apple MacBook Pro laptops with M4 / M4 Pro or M5 / M5 Pro chips are acceptable for architecture coursework. These Apple Silicon processors offer strong performance in many architecture applications, including Rhino 8 for Mac, Adobe Creative Cloud, SketchUp, and Twinmotion.

- **Chip:** M4 Pro or M5 Pro recommended, M4 or M5 will work.
- **Memory:** 24 GB unified memory minimum, more recommended if can afford.
- **Storage:** 512 GB SSD minimum; 1 TB recommended.
- **Display:** 16-inch model recommended for design work.

Important: Some software used in the curriculum (and in many professional settings) is Windows-only (e.g., certain Revit features, some Grasshopper plugins). Mac users should be prepared to use **Illinois Anyware** or campus computer labs for Windows-only workflows if they come up. Tutorials may be demonstrated on Windows. Older MacBooks (M1, M2, M3 base chips without Pro/Max) and Intel-based Macs are not recommended. The newest generation of premium Mac chips and softwares are totally compatible with the needs of an architecture student

ACCESSORIES

- **Three-Button Mouse:** A three-button mouse is required for Rhino and other 3D modeling software. Any affordable USB or wireless three-button mouse will work.
- **External Monitor:** An inexpensive external monitor (24–27 inch, 1080p or higher) is highly recommended for ergonomics and additional screen real estate when working on complex drawings and models. Quality options are available for under $200, you can lock to your desk, and will save your neck over time. Not required but might be something to think about as you proceed through architecture school.

SOFTWARE

- Academic versions at reduced prices are available from the UI Webstore (webstore.illinois.edu).
- Microsoft Office 365 – includes full versions of Word, Excel, and PowerPoint.
- Adobe Creative Cloud – includes full versions of most Adobe products.
- Autodesk Student Software – AutoCAD, Revit, etc. are free to students (students.autodesk.com).
- Rhinoceros 3D CAD (rhino3d.com) or SketchUp (sketchup.com).