School of Design

2024-2025 Computer Software and Hardware Requirements

The Architecture Program incorporates state of the art digital technologies in the architecture and interior design curriculum. As part of our comprehensive design pedagogy, we address the use and implementation of digital technologies as a critical framework for the exploration of multiple systems of design inquiry. This implies a strong emphasis on conceptual thinking as a primary way to establish the appropriateness of certain tools or representational techniques.

Thus, all students in the Architecture Program are required to lease, purchase, or have ready access to a desktop computer (or a laptop) that either meets or exceeds the specifications listed below. Students can choose between PC or Mac with Windows platform. A 1080P webcam and an external mouse with 3-button with scroll wheel are absolutely required for all the configurations listed below.

When computer shopping, many major electronics retailers might be unfamiliar with the graphics requirements associated with applications such as Autodesk, Adobe Creative Suite, or Rhinoceros. The Architecture Program recommends that you consider systems similar to those that will support 3D animated gaming and VR capabilities. These systems often have comparable video cards and sufficient memory necessary to support the 3D modeling and animation software required. The School of Design and the Architecture Program do not recommend any vendor or manufacturer of computer equipment.

Optional Equipment: the following equipment and accessories are recommended, but not required:
- Desktop Printer & Scanner
- General Computer Utility and Maintenance Software such as Anti-Virus, Malware blocker, etc.
- USB Flash Drive: 1TB or bigger
- External Hard Drive: 5TB or bigger

NOTE: Software acquisition and installation are the student's responsibility. The Program's staff is NOT responsible for this aspect of computer ownership and use. Note also: The Program and its staff are NOT responsible for INDIVIDUAL STUDENT COMPUTER maintenance. **Note**: It is recommended that you obtain a warranty service package (3-year period) for next-day manufacturer service no matter what vendor you use.

Apple computers are required to have either a dual boot operating system or an operating system emulator (such as Parallels) for Windows 11, which will enable access to the School's software and peripheral equipment. The expected useful life of a computer is three years. Architecture is a compute and graphics intensive program; recommended configurations are at the higher end with faster processors, more memory, and a discreet graphics card.

The Architecture Program recommends that any student intending to purchase an Apple verify **"equal to or better than"** performance to the specifications listed below.

Hardware	Windows	Mac (MacBook Pro or iMac w/M3 Chip) *
CPU:	Intel i7-14700 processor or better	Apple M3 Chip w/ 12-core CPU or better
OS:	Windows 11 Home	OSX 13.0 Ventura with Parallels Desktop 18
Display:	15" Full-HD (1080p minimum) or better	15" Full-HD (1080p minimum) or better
RAM:	64 GB or more (128 GB preferred)	18 GB or more (36 GB preferred)
Disk Storage:	2TB or better (4 TB preferred)	512 GB SSD Storage (2 TB preferred)
Optical Drive:	DVD +/- R/RW (*optional)	External DVD +/- R/RW (*optional)
External Mouse:	3-button with scroll wheel	3-button with scroll wheel
Video Card:	Nvidia RTX 4060 or better	M3 Pro or M3 Max

*Note: The Architecture Program ONLY recommend the highest end model of MacBook M3 Pro, the 16" version, or the iMac with Apple M3 Chip and the M3 Pro or M3 Max graphic set up. The other models come equipped with an onboard chip that is considerably less powerful and will not work well enough with the various 3D and VR software.

Software Requirements
* Prices are as of 08/01/2024

2nd Year
01: Fall Quarter
To run the PC version of AutoCAD and Rhino, Mac Users have to install Parallels and have Windows 11.

- Parallels 18 (for Mac users only): $49.99/year (Student license) Includes support for latest OS X and Windows.
- Adobe Creative Suite CC for Students ($19.99/month)
- AutoCAD (Free with a LA Tech student email address)

Visit: http://students.autodesk.com/

For the 2022-2023 academic year the Architecture program will continue using the Autodesk Student Software Program. AutoCAD, Revit Architecture, and other titles may be downloaded directly from the Autodesk Education Community website. All titles are 13-month licenses timed from the date of software activation. To obtain software students are required to register with Autodesk using their student email address. This email can be created as soon as the student has been registered for classes. Once registered with Autodesk students will be able to download software installers directly from Autodesk. These installers vary in size from 1gb to 6.5gb in size. **Students should plan to download and install the software before arriving for fall quarter**. Along with the installer Autodesk issues a user-specific license and product key to register and authenticate the software. Software may be downloaded from Autodesk Education Community: http://students.autodesk.com/

Please refer to the **Autodesk Student Download Instructions** if more information is needed.

02: Winter Quarter
- Rhinoceros 7 for Windows: Student License $195
- Rhinoceros 7 for Mac: Student License $195

The Architecture program requires Rhino for solid modeling. Student licenses for Rhino 7 are available from the publisher via their website. The license is a normal commercial license sold at a discounted price. For more information contact Rhino 3D at (206) 545-7000 or order from the following web page: https://www.rhino3d.com/sales/north-america/United_States

3rd Year
01: Fall Quarter
- Adobe InDesign (This is included with Adobe Creative Suite CC)

Rendering Packages:
- Lumion: Free (Required and provided by instructors)
- Twinmotion (Free for students)

Other options might include:
- Flamingo: $195 (*Proof of student, faculty, or school status required with educational orders)
- KeyShot: $95/year (Educational license)
- V-Ray Educational: $149
- 3ds Max: Visit http://students.autodesk.com/ (free license for students with a valid LATech email address)

4th Year and Beyond
01: Winter Quarter
- Revit Building Design: Visit: http://students.autodesk.com/ (free license for students with a valid LATech email address)

Other Utility Apps
- Windows 11
- Microsoft Office 365: Free for LA Tech Students; this includes Word, Excel, PowerPoint, & Outlook.