2021 Computer Purchase Requirements for All Architecture, Interior Architecture, and Landscape Architecture Students

These requirements apply to all Architecture, Interior Architecture, and Landscape Architecture students entering the college in the summer / fall of 2021.

About Your Technology Package

The College of Architecture and Design is specifying the following technology package for all Architecture, Interior Architecture, and Landscape Architecture students. Reliability, support, and productivity in relation to professional CAD and graphics applications have been key criteria in developing these specifications.

Where to Purchase Your Technology Package

All systems must be purchased through the University of Tennessee Bookstore Technology Center (VolTech). MAC USERS, PLEASE READ: If you purchase a Mac, Windows will be installed and configured by VolTech staff at no additional cost. Note that you must first download Windows 10 (see page 5 for download information) and then leave your system with VolTech for setup. Installing Windows on your Mac will take at least a day, with times getting longer closer to the start of fall classes due to increased volume. Note that Windows downloads may also take longer closer to the start of fall classes due to server load. See also "Notes Regarding Software" below.

When to Purchase Your Technology Package

To insure timely delivery, all systems should be purchased through the Bookstore Technology Center (VolTech) between April 1 and July 16, 2021.
NOTE: ORDERS MAY BE DELAYED DUE TO COVID-19 RESTRICTIONS. PLEASE PLAN ACCORDINGLY

How to Purchase Your Technology Package

Forms of payment – Cash, MC, VISA, Discover, American Express, and VolCard, either in store or online

To Pre-order online: (online preorder site will open April 1, 2021.) Go to: https://www.utvolshop.com/college-of-architecture-and-design

Choose either the Mac Computer or one of the Dell computers listed on the VolTech website. These are the units listed in this handout as configured. The online packages include all required hardware plus the Rhino software application. Adobe CC, V-Ray and the free downloads must be acquired separately by the end user. See "Notes Regarding Software" below for more information on required software.

Contact VolTech for any desired hardware upgrade options. See "For More Information Regarding the Purchase of Your Technology Package" on page 2 for contact info.

Go to checkout to pay for your purchase. **Be sure to enter the name of the student in the ORDER NOTES field at checkout.**

You can also stop by VolTech in the Student Union to place your order any weekday between 8:30-5:00.
NOTE: STORE HOURS MAY DIFFER DUE TO COVID-19 RESTRICTIONS. PLEASE CALL 865-974-2930 TO CONFIRM.

When and Where to Take Delivery of Your Technology Package

Students can typically pick up their systems in the store within four weeks of placing their order. You will be contacted by VolTech once your order arrives.
NOTE: ORDERS MAY BE DELAYED DUE TO COVID-19 RESTRICTIONS. PLEASE PLAN ACCORDINGLY.

Technology Package Purchasing Exceptions

In certain exceptional circumstances, and ONLY with the explicit permission of the director of your program of study, students may be allowed to purchase hardware from sources other than VolTech. If this is the case, you will still be required to purchase the required Rhino 7 software application from VolTech. Be aware that VolTech staff will neither pre-configure systems nor provide free tech support on hardware purchased elsewhere.

Notes Regarding Software

NOTE: Please see page 5 for information on the free download of Windows for installation on Mac laptops.

Microsoft Office Pro Plus is available as a free student download: https://oit.utk.edu/software-hardware/proplus/

Adobe Creative Cloud subscription: Students purchase and download Adobe CC directly from Adobe's website: https://www.adobe.com/creativecloud/buy/students.html

Rhino: Rhino 7 licenses are available for in-store pick up at VolTech. Students MUST purchase Rhino 7 for Windows, as required plugins are not available for the Mac version of Rhino.

V-Ray plugin for Rhino subscription: Students purchase and download V-Ray for Rhino directly from Chaos Group's website: https://www.chaosgroup.com/education/students
> V-Ray for Rhino is required for all entering Landscape Architecture Students. Architecture and Interior Architecture students will be advised on purchasing V-Ray at a later date.

AutoCAD, Revit, and 3D Studio Max are available as a free student downloads: https://www.autodesk.com/education/home
> Revit is required for Architecture and Interior Architecture students only. 3D Studio Max is optional.

ArcGIS is available as a free UTK student download: https://oit.utk.edu/software-hardware/software/
> ArcGIS is required for Architecture and Landscape Architecture students only.

For More Information Regarding the Purchase of Your Technology Package

For inquiries regarding VolTech purchasing procedures and hardware upgrades:

VolTech
UT Student Union Level
G3 (865) 974-2930
Email: voltech@utk.edu

For inquiries regarding the technical specifications included in the technology package:

Jeff Wilkinson
IT Coordinator
College of Architecture and Design
Phone: (865) 974-3261
Email: jwilkin3@utk.edu

For inquiries regarding exceptions to the VolTech purchasing requirement:

Jason Young	Milagros Zingoni	Gale Fulton
Director - Architecture	Director - Interior Architecture	Director - Landscape Architecture
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2021 Laptop Options for All Architecture, Interior Architecture, and Landscape Architecture Students

Apple MacBook Pro 16"

Overview: The MacBook Pro is a high-end laptop designed to be thin and lightweight. There are several optional upgrades available for the MacBook Pro.

Hard Drive: The MacBook Pro comes with a 1TB SSD drive. Drives up to 8TB in capacity are available. In order to install and run the required Windows 10 OS, this drive will need to be partitioned 512GB Mac and 512GB Windows.

Memory: The MacBook Pro comes standard with 32GB of memory, and maxes out at 64GB.

Graphics Card: The MacBook Pro comes with an AMD Radeon Pro 5500M graphics card. This is a high-end gaming class graphics card with 4GB of memory onboard. Upgraded graphics cards are available.

LCD Display: The MacBook Pro comes with a very high definition 16" display capable of 3072x1920 resolution. Apple calls this their "Retina" display, which simply means that there is no discernable pixilation when viewed from a distance of around 16" away. Note that all students have 27" displays capable of 2880x1800 resolution mounted to their studio desks, which can be driven by the MacBook Pro.

Service: A 4-year extended warranty that includes accident protection is included as part of this MacBook Pro purchase. VolTech, the campus computer store, is an authorized Apple service center. MacBook Pros with hardware issues can be taken to VolTech, where they typically receive next-day service.

Dell Mobile Precision Workstation 3551

Overview: The Precision 3551 is a high-end mobile workstation designed to strike a good balance between power and physical size/weight at a very affordable price. There are several optional upgrades available for the Precision 3551.

Hard Drive: The Precision 3551 comes with a 512GB SSD drive. Drives up to 2TB in capacity are available, with the option to install an additional second 2TB hard drive as well.

Memory: The Precision 3551 comes standard with 32GB of memory, and maxes out at 64GB.

Graphics Card: The Precision 3551 comes with an Nvidia Quadro P620 graphics card. This is a high-end workstation-class graphics card with 4GB of memory onboard.

LCD Display: Note that all students have high-resolution 27" displays mounted to their studio desks. The Precision 3551 itself is specified with an HD display capable of 1920x1080 resolution. Users have the option of upgrading to the touch version of this display.

Service: The Precision 3551 comes with a 4-year extended warranty that includes accident protection. Precision 3551s with hardware issues receive next day on-site service from Dell.

Dell Mobile Precision Workstation 5550

Overview: The Precision 5550 is a high-end mobile workstation designed to both maximize power and be very thin and lightweight. There are quite a few optional upgrades available for the Precision 5550.

Hard Drive: The Precision 5550 comes with a 512GB SSD drive. Drives up to 2TB in capacity are available, with the option to install an additional second 2TB hard drive as well.

Memory: The Precision 5550 comes standard with 32GB of memory, and maxes out at 64GB.

Graphics Card: The Precision 5550 comes with an Nvidia Quadro T2000 graphics card. This is a high-end workstation-class graphics card with 4GB of memory onboard.

LCD Display: Note that all students have high-resolution 27" displays mounted to their studio desks. This allows the Precision 5550 itself to be specified with a standard HD display capable of 1920x1080 resolution – a savings of nearly $250. Users have the option of upgrading to a very high definition 15.6" 3840x2400 resolution UltraSharp touch display. Dell calls this their "UHD Touch" display, which simply means that in addition to the touch capability, there is no discernable pixilation when viewed from a distance of around 16" away.

Service: The Precision 5550 comes with a 4-year extended warranty that includes accident protection. Precision 5550s with hardware issues receive next day on-site service from Dell.

Dell Mobile Precision Workstation 7550

Overview: The Precision 7550 is a high-end mobile workstation designed to maximize power and offer hardware flexibility such as multiple hard drives and expanded memory options. It is not intended to be thin or lightweight. There are many optional upgrades available for the Precision 7550.

Hard Drive: The Precision 7550 comes with a 512GB SSD drive. Drives up to 2TB in capacity are available, with the option to install two additional 2TB hard drives as well.

Memory: The Precision 7540 comes standard with 32GB of memory, and maxes out at 128GB.

Graphics Card: The Precision 7550 comes with an Nvidia Quadro T2000 graphics card. This is a high-end workstation-class graphics card with 4GB of memory onboard. Upgraded graphics cards are available.

LCD Display: Note that all students have high-resolution 27" displays mounted to their studio desks. This allows the Precision 7550 itself to be specified with a standard HD display capable of 1920x1080 resolution – a savings of $200. Users have the option of upgrading to a very high definition 15.6" 3840x2160 resolution UltraSharp display. Dell calls this their "UHD UltraSharp" display, which simply means that there is no discernable pixilation when viewed from a distance of around 16" away.

Service: The Precision 7550 comes with a 4-year extended warranty that includes accident protection. Precision 7550s with hardware issues receive next day on-site service from Dell.

2021 Laptop Specifications for All Architecture, Interior Architecture, and Landscape Architecture Students

Required Hardware	Apple MacBook Pro 16"	Dell Precision Mobile Workstation 3551	Dell Precision Mobile Workstation 5550	Dell Precision Mobile Workstation 7550
Processor	2.4GHz i9 8-core w/16MB cache	2.4GHz i9 8-core w/16MB cache	2.4GHz i9 8-core w/16MB cache	2.4GHz i9 8-core w/16MB cache
Memory	32GB DDR4 (64 GB max.)	32GB DDR4 (2 slots - 64GB max.)	32GB DDR4 (2 slots - 64GB max.)	32GB DDR4 (4 slots - 128GB max.)
Hard Drive	1TB PCIe SSD drive *	512GB PCIe SSD drive	512GB PCIe SSD drive	512GB PCIe SSD drive
Graphics Card	AMD Radeon Pro 5500M w/ 4GB GDDR6	Nvidia Quadro P620 w/4GB GDDR5	Nvidia Quadro T2000 w/4GB GDDR5	Nvidia Quadro T2000 w/4GB GDDR5
Display	16" Retina (3072x1920)	15.6" UltraSharp FHD (1920x1080)	15.6" UltraSharp FHD+ (1920x1200)	15.6" UltraSharp FHD (1920x1080)
Ethernet	none (external adapter optional)	Gigabit	none (external adapter optional)	Gigabit
Wireless	802.11ac	802.11ax	802.11ax	802.11ax
Bluetooth	v5.0	v5.1	v5.1	v5.1
Webcam	720p HD camera	720p HD camera	720p HD camera	720p HD camera
Ports	4-Thunderbolt 3 / 1-Audio	3-USB 3.2 / 1-USB-C / 1- SDXC	1-USB-C / 2-Thunderbolt 3 / 1-SDXC / 1-Audio	2-USB 3.0 / 2-Thunderbolt 3 / 1- SDXC
		1-HDMI / 1-Audio		1-Mini DisplayPort / 1-HDMI / 1-Audio
Operating System	mac OS 11 (64 bit)	Windows 10 Professional (64 bit)	Windows 10 Professional (64 bit)	Windows 10 Professional (64 bit)
Dimensions & Weight	9.68" x 14.09" x 0.64" 4.3 lbs	9.3" x 14.13" x0.98" 4.3 lbs	9.07" x 13.56" x 0.46" 4.06 lbs	9.53" x 14.17" x 1.08" 5.42 lbs
Sub-Total	$3,109.00	$2,199.00	$2,799.00	$2,499.00
Warranty	4-yr SafeWare / accident care $374.00	4-yr warranty / accident care included	4-yr warranty / accident care included	4-yr warranty / accident care included
Required Adapter	HDMI/USB Multiport Adapter $36.00	n/a	included	n/a
HDMI Cable	StarTech 6 ft HS HDMI Cable $10.00	StarTech 6 ft HS HDMI Cable $10.00	StarTech 6 ft HS HDMI Cable $10.00	StarTech 6 ft HS HDMI Cable $10.00
External 1TB Backup Drive	Lacie Rugged USB -C drive $99.00	Lacie Rugged USB -C drive $99.00	Lacie Rugged USB -C drive $99.00	Lacie Rugged USB -C drive $99.00
Mouse	MacAlly USB-C Mouse $20.00	MacAlly USB-C Mouse $20.00	MacAlly USB-C Mouse $20.00	MacAlly USB-C Mouse $20.00
Required Hardware Price	**$3,648.00**	**$2,328.00**	**$2,928.00**	**$2,628.00**
Required Software				
Microsoft Windows 10 PRO	free download IMPORTANT: see page 5	included	included	included
Microsoft Office 365 Pro Plus	free download	free download	free download	free download
Rhino 3D v7 (Win)	$89.00	$89.00	$89.00	$89.00
V-Ray render plugin for Rhino	REQUIRED FOR SOME STUDENTS, but not included in this package. Purchase directly from chaosgroup.com @ $99.00 / year See also "Notes Regarding Software" on page 2.			
Adobe CC 1 yr subscription	REQUIRED FOR ALL STUDENTS, but not included in this package. Purchase directly from adobe.com @ $19.99 / month. See also "Notes Regarding Software" on page 2.			
AutoCAD (Win)	free download	free download	free download	free download
Revit (Win) - AR & ID students	free download	free download	free download	free download
3D Studio Max (Win) - Optional	free download	free download	free download	free download
ArcGIS (Win) - LA students	free download	free download	free download	free download
Required Software Price	**$89.00**	**$89.00**	**$89.00**	**$89.00**
Total Required Items	**$3,737.00** plus sales tax	**$2,417.00** plus sales tax	**$3,017.00** plus sales tax	**$2,717.00** plus sales tax

Important Notes

Hardware Upgrades	* 1TB drive required , since the drive will need to be partitioned 512GB Mac / 512GB Windows.
	Contact VolTech for more hardware upgrade options. See "For More Information Regarding the Purchase of Your Technology Package" on page 2 for contact info.

Installing Windows on a Mac

Overview

The College of Architecture and Design expects all Mac users to have Windows installed and running properly on their Macs by the first day of classes. The college strongly recommends that Mac users have Windows installed by the professionals at VolTech, rather than attempting the installation themselves. There are several advantages to having Windows installed by VolTech:

1. VolTech installs Windows on the Macs sold to our students at no additional charge.
2. Windows installation on a Mac is both tedious and time consuming.
3. VolTech is highly qualified to troubleshoot any issues that might arise with the Windows installation.

For those users who prefer to install Windows themselves, please note that Windows is to be installed via Bootcamp (not VMware or Parallels.) The absolute minimum Bootcamp partition size is 512GB. Feel free to contact Jeff Wilkinson (jwilkin3@utk.edu) for a technical outline of the procedure.

Obtaining Windows for Installation on a Mac

The university's agreement with Microsoft allows all students to download a licensed copy of Windows at no cost. This download will be available within 24 hours of each student's registration for their first class. This download requires that each student login with their netID and password. You will receive an email stating that you have 15 days to download Windows, and offering to extend the download period to 24 months for a small one-time fee. We strongly recommend that students take advantage of this offer in the event that they may need to reinstall Windows at some point in the future.

Windows Installation on a Mac by VolTech

24 hours after having registered for at least one class at UTK, simply stop by VolTech and login to the Windows download site on your laptop. Leave your laptop with VolTech staff, and they will let you know once the Windows installation is complete (typically completed within 24 hours.)

Windows Installation on a Mac by the End User

24 hours after having registered for at least one class at UTK, go to   https://utk.onthehub.com. On the "Students" tab, you will find the Windows 10 download. You will need to login with your netID and password. Please note that Windows is to be installed via Bootcamp (not VMware or Parallels.) The absolute minimum Bootcamp partition size is 512GB. Feel free to contact Jeff Wilkinson (jwilkin3@utk.edu) for a technical outline of the procedure.