

University of Hartford - Department of Architecture
Computer Recommendations for Students
2022 – 2023

Buying Source	Apple	Dell (or other comparable Windows)
Vendor site	www.apple.com https://www.apple.com/us-hed/shop	www.dell.com
Use	Architecture: design, documentation, visualization, animation	Architecture: design, documentation, visualization, animation
Model	MacBook Pro 16 w/Touch Bar and Touch ID	XPS 15 7590 (XPS 15 Laptop non-touch screen option)
Processor Speed/GHz	Apple M1 Pro, 10-core CPU, 16-core GPU, 16-core Neural Engine	12 th Generation Intel Core i7-12700H (24MB cache, up to 14-core, 4.70 GHz)
Operating System	MAC IOS and Windows 10 (See note 5 below)	Windows 11 Home (Pro available for \$60 more)
Memory RAM	16GB 2666 MHz DDR4 (32GB better: +\$360)	16GB, DDR5-4800MHz 2x8G SDRAM, (32 better but is \$150 more)
Hard Drive Size	512GB SSD storage (1TB: +\$200)	512GB M.2 PCIe NVMe SSD storage
Ports	4 Thunderbolt 3 ports	1 USB-C port, SD Card, HDMI, 2 Thunderbolt 3 ports
Screen Size	16"	15.6" touch display (non-touch available, subtract \$400)
Graphics	AMD Radeon Pro 56300M with 4GB GDDR6 memory	NVIDIA GeForce RTX 3050 4GB GDDR6
Warranty	Apple Care (options up to 3 years)	3-yr
Pointer device	Wireless Mouse (extra)	Wireless Mouse (extra)
Estimated Base Cost	~\$2,300	~\$2,155

Other considerations	
General Software Applications	Please see Note 1 below regarding complimentary Microsoft 365 licenses provided to each University of Hartford student.
Architectural Software	Please see Note 2 below. Also, Autodesk provides free licenses to students for Revit and AutoCAD. SketchUp is also free to students. These will not be used until 2 nd year, beginning with ADT 231 Introduction to Digital Tools.
Monitor	(Optional but recommended) 20" Flat screen with compatible display connection using HDMI or Displayport.
Printer	Not Required. See Note 3 below. If you want the convenience of a personal printer, recommend color inkjet, 8 1/2" x 11" capability fine. 11" x 17" better
Security	Locking cable.
Backup	Flash drives: 2@512GB or larger or external hard drive for backing up files. (See Note 4 below).
Network	Information Technology Services: http://uhaweb.hartford.edu/its/ITStandards.html http://uhaweb.hartford.edu/its/services.htm .

Notes:

Configurations listed above are subject to change by Apple or Dell. The above is current as of May 15, 2022.

- 1) All University of Hartford students are provided with Microsoft 365 software for both online and downloadable applications. The Microsoft 365 software includes: Word, Excel, Powerpoint, Outlook, OneDrive, OneNote, Publisher, Class Notebook, and Forms.
- 2) First year architecture students **will not need the computer for architecture courses** but you will need one for other courses. If you have a relatively new laptop from high school use, this is fine for the first year. *Although some students begin to explore the use of computers for building design, we direct you away from that for the first three semesters*, requiring you to explore hand drawing and sketching as a necessary skill for design as well as for the development of the understanding of design and digital graphics.
- 3) There are printers and plotters (large format printers) in the architecture department, computer labs around campus, and the Library for student use. Personal printers are not required but they can be more convenient.
- 4) Backup files often! Two external devices to rotate backups, or one flash drive and an external hard drive. The external should be at least 500 GB. All University of Hartford students are provided with 1TB of "Onedrive" cloud storage space which can also be used for backing up / storing digital files. Students should create a digital portfolio by second year and having a large capacity backup is essential.
- 5) Many architecture specific software packages (ie: Revit) must be run on the Windows Operating System. Therefore, if a student wishes to utilize a Mac computer, they will need to install the Windows Operating System by installing Parallels software. The Parallels software allows you to easily jump between MacOS and Windows.