Computer Configuration, Related Recommendations and Resources

If you plan to purchase a computer before school starts, below are some minimum configurations and facts that may be helpful. If you are buying a computer, we recommend a new one. For a little more money, you get a much faster computer with a warranty: a much better value.

**CPU**
Within the same family of processors, higher clock speeds and more cache (up to 8MB) means better performance. The Intel Core i series (12th generation) is highly recommended as it offers good performance and long battery life. There are Core i5, Core i7 and Core i9 processors. The higher the numbers the more capable of running multiple programs at the same time. The new M1 and M2 chips for MacBooks offers very good performance and excellent battery life but may not be fully compatible with some older programs.

**Operating System**
Most software/applications work best with Windows 10 or 11; macOS 10.14.6 and newer

**Hard Drive**
256 Gigabytes (GB) minimum. If you will be using statistical or database software with very large data sets you may want at least 500GB. Solid state drives (SSD) offer better performance. Though they cost more, solid state hard drives offer the best performance and reliability but lower capacity for the money.

**RAM**
8GB is recommended as a minimum. 16GB is preferred as it will let you run more programs at the same time.

**Webcam/headset**
If your laptop does not include a webcam or you are using a desktop, you will want to purchase one to be able fully participate in online learning. The Logitech C615 or similar is recommended. Even if your laptop has built in microphones, we recommend a headset such as the Logitech H340. Using a headset will make it easier for your voice to be heard more clearly while reducing surrounding noise.

**Optical Drive**
Most newer laptops and small desktops no longer come with a DVD or CD drive. If you wish to view DVDs or Bluray disks, you may wish to opt for a larger laptop or desktop that has one built in or purchase an external drive that can attach to your computer.

**Online Storage**
LionMail Drive offers unlimited storage. You can access your LionMail drive using this link: [https://cuit.columbia.edu/email/lionmail/drive](https://cuit.columbia.edu/email/lionmail/drive)
Removable Storage
USB flash memory/thumb drive: These devices are small, fast, come in capacities ranging
from 16MB to over 1TB. They connect via the USB port, you may need an adapter if your
laptop only has USB-C ports. Encrypted flash drives are highly recommended to ensure that
your personal documents are kept secure. If your flash drive is not encrypted, we recommend
password protecting your files. If your flash drive is lost or stolen, your personal information
will be secure. For more information on encrypting files and setting passwords, see the link

Sound
Laptop audio is usually not configurable, but desktops often give you options better sound
cards and speakers

Monitor
For desktops 19" minimum, 24" recommended. For laptops, 12" to 14.1" recommended.
Smaller screens are lighter but offer less real estate. Larger screens make it easier to work on
large spreadsheets, but make the laptop larger and heavier.

Tablets
A tablet or smartphone can also be used with most of the apps that facilitate remote learning
(e.g. Canvas, Zoom, Panopto), but it may be more difficult to download some types of files or
to submit certain types of assignments. The app versions will also be more limited in features
and functions as compared to the laptop/desktop version.

Wireless
Wireless connectivity (WiFi) is highly recommended for all laptops. When purchasing this
feature, keep in mind that the University uses 802.11n standard. The entire Social Work
building has wireless internet. For more information see:
http://cuit.columbia.edu/columbia-u-secure-wireless-network

You can also setup your laptop to print to the Social Work printers. For instructions for
printing from your laptop see:
http://cuit.columbia.edu/pawprintquickstart

Ethernet
Many newer laptops no longer have an ethernet port, though desktops usually still do. A wired
ethernet connection can provide a faster, more reliable connection than WiFi. If your computer
doesn't have an ethernet port, you can usually buy a Universal Serial Bus (USB) dongle that
will provide one. There are also several places on campus you may plug into the network,
including the Social Work building.

Bluetooth
You may choose to get Bluetooth on your computer. Bluetooth is a personal area
networking technology that lets devices such as printers, mice, headphones, phones, etc.
talk to each other.

Service/Warranty
If your computer vendor offers a 3-year extended on-site service warranty, and you are not
comfortable fixing your own computer, we suggest you purchase it. If you are buying a Dell or
Apple through the Columbia discount program, you receive additional discounts if you opt for
a 3-year warranty. You may also opt for a complete care type package that covers accidental
damage.
Software

Backup
It is highly recommended that you back up your important documents and files to another medium. This can include physical media such as a usb flash drive or cloud storage such as Lionmail Drive. There also backup services that use software to back up your files automatically such as Carbonite and Mozy.

Security
CUIT offers Malwarebytes for virus protection, and PC Phonehome at the following URLs:
https://cuit.columbia.edu/anti-malware
https://cuit.columbia.edu/pc-phonehome

Productivity
You will probably want Microsoft Office 2019 Professional or later. (All editions have Word and Excel; the Professional Edition includes Access, a database application.) Students are can download one free copy at the following page:
https://cuit.columbia.edu/cuit/software-downloads/#/cu_info_card-8329

SPSS (Statistical Package for the Social Sciences)
Students interested in licensing SPSS (PC/Mac) may purchase/lease the SPSS at a discount for either a six or twelve month license through e-academy at the following web site: http://www.onthehub.com/spss/

Other Software
Columbia has various other software you may want at the following URL: http://cuit.columbia.edu/cuit/software-downloads

Training Opportunities
(1) Columbia Libraries: You may choose to take workshops offered by the libraries (e.g., Zotero Citation Management and How to use CLIO): https://library.columbia.edu/using-libraries/workshops.html
(2) LinkedIn Learning: Columbia University offers a wide range of online courses which are available to faculty, staff, and students: https://cuit.columbia.edu/linkedin-learning

Purchasing/Discounts
You may receive discounts on new computers when purchasing through these links:
http://www.dell.com/columbia
http://store.apple.com/us_edu_21516