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 6MB) means better performance. The Intel Core i series (4th generation) is highly recommended as it offers good performance and long battery life. There are Core i3, Core i5 and Core i7 processors. The higher the numbers the more powerful the processor.

**Operating System**
Windows 10 64bit is recommended. 64bit version is required if you want to use more than 4GB of RAM. While most faculty have Windows 7 the School is migrating to Windows 10.

**Hard Drive**
120 Gigabytes (GB) minimum. If you will be using statistical or database software with very large data sets you may want at least 256GB. Faster hard drives (7200RPM or 10,000RPM) 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.

**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.

**Removable Storage**
USB flash memory/thumb drive: These devices are small, fast, come in capacities ranging from 16MB to over 512GB. They connect via the USB port found on all computer made in the last 15 years. 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 [Instructions for Using 7-Zip to Encrypt Files](#).

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

**Video**
64 MB minimum, the higher end graphic cards are better suited for videos and gaming. The video card built into new computers is more than adequate for non-gaming applications. If you purchase an Apple laptop and plan to give presentations, you will want to purchase the video dongle that lets you connect to a VGA projector.
Monitor
For desktops 19" minimum, 22" 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.

Netbooks and Tablets
While tablet computers offer a small, light, and affordable computing option, they are often unsuitable for doing more involved work such as writing papers. The screen is often very small, leading to eye strain and uncomfortable seating position. The keyboard and/or touch screen is often small and not conducive to typing for extended periods of time. Before deciding to buy a netbook, we recommend trying one at a local store. Please keep in mind that printing options are very limited with tablets.

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](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](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 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 Google drive. There also backup services that use software to back up your files automatically such as Carbonite and Mozy.
Security
CUIT offers Symantec AntiVirus for virus protection, and PC Phonehome at the following URL: http://cuit.columbia.edu/cuit/software-downloads/computer-security-software

Productivity
You will probably want Microsoft Office 2010 Professional or later. (All editions have Word and Excel; the Professional Edition includes Access, a database application.) All other software you can purchase at the CU bookstore, or other software vendors. You can purchase the Student and Teacher edition at most retailers which allows you to install Word, Excel, Outlook, and PowerPoint on up to 3 computers.

You may also consider Openoffice.org. It is a free, multiplatform and multilingual office suite. It is generally interoperable with other office suites, though you may run into compatibility issues using advanced functions. http://www.openoffice.org/

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
You may choose to take workshops offered by the libraries. There are classes offered for various software including Adobe Photoshop, Endnote, FileMaker Pro, NVIVO, and RefWorks. http://library.columbia.edu/research/workshops.html
Columbia University also provides Lynda.com an online service that provides video-based tutorials and resources on web and software technology to explore. https://www.lynda.com/