

# 2016 Computer Buying Guide: What You Would Want (And Good Reasons to Wait)

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My fellow seniors, our stay at Tusky Valley is almost over. You know how I am aware of this (besides the countdown widget on my tablet)? I am getting *the question*. The first question I get every year from people about college tech: "I want a new computer for college! What should I get, Schandel?" The problem is that this question doesn't really have a uniform answer. It would be bad to tell a hardcore gamer to get a \$200 Chromebox, and at the same time it is pointless to tell someone who only types essays and checks Twitter to go out and buy a \$1,500 laptop with a really fast processor and a ridiculous amount of excess storage. In this guide, we will be outlining what to look for in a laptop in as easy to follow terms as humanly possible, from the nitty-gritty details of what you want on the inside of your new computer, to if you should get a desktop or laptop, to even why jumping the gun and making a purchase now may not be your best bet!

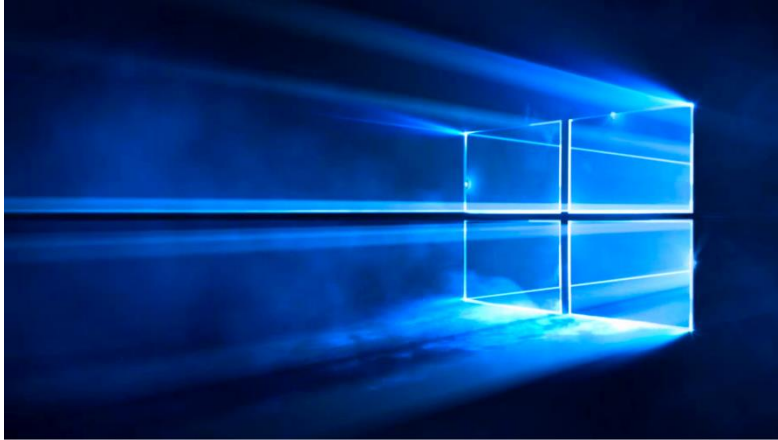
## Do you want to get a laptop or desktop?

This is the easiest part of the process: deciding between a laptop and desktop. For most students (especially seniors), a laptop is probably the preferred choice. They are portable, relatively small (usually), and easy to plug in and play. Most laptops today run from 11" to 15" in size with a few outliers that go bigger or smaller, depending on what model you choose. Many new Windows laptops as well as a select number of Chromebooks come with touchscreens. Within this growing sect of touchscreen laptops is a whole new breed of laptop known as the hybrid or convertible. In plain English, with a hybrid, you can be hashing out papers one minute using your computer as a "traditional" laptop, and the next you can adjust to a "tablet" mode to sling birds with tempers at green swine while binge-watching your favorite TV show. My personal recommendation is to consider a hybrid if going the laptop route, as this new type of laptop is definitely looking to be a serious player that could replace the traditional clamshell laptop (if it hasn't already).

My only major concern with a laptop of any kind is that the constantly decreasing thickness of laptops has made them almost impossible for the average person to fix on their own (if you are one of the few people, like me, who would still try that before taking it to the Geek Squad or Genius Bar). If upgrading and working on your laptop is a concern, you will either have to find a laptop that has enough room inside to allow for this or go for a desktop. However, unless you are a gamer or one of the aforementioned techies, you probably won't want a traditional tower-and-monitor desktop, and you will want either an all-in-one desktop (which can also be bought with a touchscreen) or a laptop of some type, as previously mentioned.

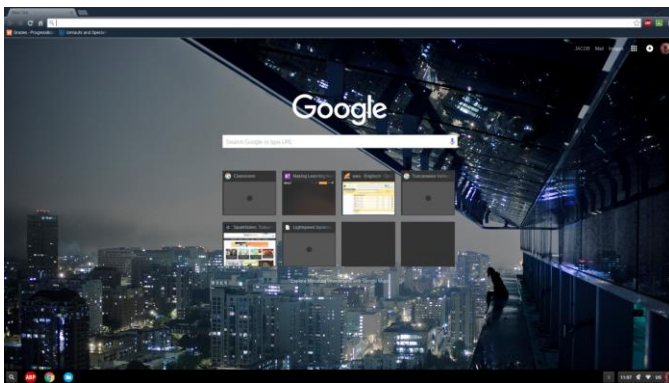
## What style of computer do I want?

This question can best be answered by personal preference. Most users may want to go for a PC (in other words, a Windows computer). With Windows 10's release back in July, the PC is looking more



promising than ever, especially now that Microsoft has brought back the Start menu from the grave. Also, most people use PCs to begin with, so they will probably be able to adjust to a new PC better than if they jumped platforms. If you are going to be doing a lot of gaming or engineering-related work, you will definitely want to go for a PC as well. For PCs, the best brands right now are HP, Lenovo, Dell, and Asus.

That being said, the other options are also very viable. Mac computers are long lasting and the best option for graphic designers and anyone wanting to do a lot of work with media files in general, but they do have little compatibility for engineering software that goes hand-in-hand with a slightly smaller choice of gaming titles. If you opt for a Mac, it is also important to note that you cannot buy a hybrid laptop running full Mac OS X from Apple, as their CEO (weirdly) compares making one to making a refrigerator that doubles as a toaster. Most of the Mac line is fair game, but I have to (regretfully) recommend avoiding the "standard" MacBook. While thinner than the rest of the Mac laptops, it only has USB type C ports for charging, flash drives, and everything else you do on your computer. USB-C is new enough that you are almost certain to have nothing that will work with it without a clunky adapter. If you want an Apple laptop, go for the MacBook Pro or the MacBook Air, which are both still thinner than many current laptops.



As far as a Chrome computer goes, here is what's up. While Chrome OS devices are much cheaper than more expensive PCs and even more expensive Macs, if you need to use standard desktop programs like Photoshop or iTunes, you will be out of luck. In addition, Chrome computers require special devices, like printers enabled with Google Cloud Print (unless you use Cloud Print with your PC or Mac, which you can read about here if you want to learn about it). In other words, that inkjet printer from 2005 won't work with a

Chrome computer without some techie magic, and for some people that won't even work. That being said, a Chrome computer is viable if you can live with these quirks for the price. The top brands for Chromebooks are HP and Dell, where you will find the best build quality. For a Chrome desktop, the LG Chromebase is the best option, or you can get the Asus Chromebit, a sub-\$100 device which plugs into an HDMI port on any screen and instantly turns that screen into a Chrome computer.

## What are specifications, and why do I care what they mean?

The hardest part of buying a computer is understanding specifications. These describe what the guts of your computer consists of. The only way to understand specifications, or specs, is to learn generally what they mean. Here's the breakdown. (Note: throughout many specs, you will see the abbreviations GB and TB, which mean gigabyte and terabyte, respectively. These are measurements of data. A movie, as a point of reference is typically around +/- 5 GB, depending on its length and whether it is HD or not. You can fit numerous albums of songs on 1 GB. For those trying to draw connections to the metric system after seeing the prefixes to these measurements, despite what your science teacher may say, the metric prefixes are NOT in terms of 1000. Rather, 1 TB = 1024 GB. Why? Because of advanced electronics.)

The heart of a computer is its processor, or CPU. With respect to brands, Intel is one of the best quality brands available. Most users will want to go for an Intel Core i5 processor, while power users will want to get a Core i7. Basic users can suffice with i3 processors or a **newer** Intel Atom for the occasional e-mail check or paper. With processors, higher numbers are better. On a computer's processor specs, you may also see a number with "GHz" next to it. This is the frequency of the processor, which tells how fast it runs. If you hear terms like "octa-core" or "quad-core," this refers to the amount of cores on a processor. More cores means more power. Most people, even some power users, can suffice with a quad-core processor, with a dual-core processor being okay **only if** you just plan on doing basic tasks like typing papers or hopping on Facebook.

RAM, or random access memory, is the temporary memory which a computer has. The more RAM you have, the more things your computer is able to do at once. For the person doing anything more than Microsoft Office and Internet tasks, go for a minimum of 8 GB of ram. For other user, 4-6 GB will suffice unless you are going the Chrome computer route.

Graphics is a big deal for most people. Graphics cards are what produce the image for your screen to show you in your computer. Cards from AMD and NVIDIA are amazing options. As far as what this whole screen resolution thing is concerned, here is what you need to know on that end of graphics. If you hear reference to something called 1080p or see a resolution of 1920x1080 on a computer's specs, that is what the typical home HDTV is that can handle full HD. The next step lower, typically, is 720p, or 1280x720, which is found in cheaper HDTVs or older model HDTVs. Right now, the top of the spectrum (which is viable for modern digital content) is something called Ultra HD, or 4K. This is 3840x2160 resolution. (Note that all numbers in the format of 3840x2160 are in reference to the height and width of the display measured in pixels.) Anyone who will be doing a lot of video watching on their laptop or will be doing high amounts of work should go for at least a 1080p (full HD) screen. The general rule of thumb, for those going for a desktop, is that anything above 23-25" should be at least 4K. However, in my personal experience (and please note that my vision may not be as good as your vision), if you use a 23-25" screen or bigger with 1080p resolution, it will look just fine. The bottom line is that it doesn't hurt to compare different resolution screens at the store before you throw down money on a computer.

The question of storage is so complex that it is actually really easy to answer. There are three different styles of storage you can get for your computer. The first style is the traditional hard drive, typically called an HDD (hard disk drive). These devices rely on rotating disks resembling really big CDs (with respect to how much you can store on them). While on one hand this allows for a lot of storage for a small amount of cost, these are relatively slower compared to their two counterparts. On the complete opposite of the spectrum is a newer style storage technology called solid state drives, or SSDs. These hold less and tend to cost a little bit more, but they are the fastest style of storage available to

consumers. The best method of comparison to what these are like is like cramming an extremely high-capacity thumb drive into a computer. In between these two styles of hard drive is what is called a hybrid drive. These drives, as the name implies, consists of a part that is solid state and a part that is a traditional hard drive. In my experience, for some inexplicable reason, these hard drives have been atrocious in terms of how long they last, typically not lasting as long as the other two styles of drives. Recently, there have been few computers which I have seen incorporating these, so they may be becoming less of a concern. Unless you want the speed that comes with one for power use or gaming, you should be fine with an HDD. An HDD is a necessity for anyone who will be downloading a ton of media or large files to their computer, in which case you will want at least 1 TB of storage. If you go for an SSD, if a possible option is to go for an SSD made by Samsung, they are by far the best brand of SSD available with their Samsung Evo line of SSDs. Be sure to go for at least 128-256 GB of storage with an SSD. This specification on a computer, while seemingly a hard decision,

## Why should I wait for buying a computer?

Getting a computer sounds enticing right now for anyone getting ready for college in the fall. Since this article is about my advice on buying a computer, I recommend waiting for the summer. There are two times throughout the year to buy laptops: November-December and July-August. Here is my reasoning to wait for summer. Companies know that kids are going to college in August. Not only do they bring out the deals for laptops then, but many companies show off their latest laptops for the very first time just in time for back to school. On the topic of deals, last summer, I can recall Dell had a deal that, if you got a laptop over a certain price (and the price was quite low), you could get a free 32" HDTV or one of greater size for a major discount, a deal great for college students who will be moving into dorms or for a family who could just use a new TV. While it isn't really bad to go out and get a laptop right now, a smart move would be to wait until summer if you want to save some money and get the latest tech for back to school!

## Hold on. You really forgot to mention a lot of stuff. Why?

To finish, it would be bad for me to not outline the things I (purposely) omitted. For example, you may wonder about good brands to look at. Essentially, if you can sit down right now and think of a brand, any brand that comes to mind will be good. The traditional computer has gotten to a place where almost every brand that is a household name is to a point where you simply get what you pay for. For example, a \$1,500 laptop is likely to outlive that \$400 laptop. Also, this article purposely didn't focus on aesthetics other than to talk about computers in general. Size is going to end up being something worth saving considering until the end as well as color, as hard as that will be for some people to swallow. If you want a computer that will last for the time you need it to and handle the workload which you will throw at it, there is no guarantee that the cute little pink laptop that is smaller than an iPad can handle boatloads of graphic design work. If you feel a need to research a computer more, I highly recommend CNET.com, as they break down computers in-depth in order to tell just how easy they are to recommend. With all of this in mind, I wish you luck as you hunt down the perfect computer!