

Specifications of a computer

Computer Specifications or Specs describes the hardware specifications of a computer system. It describes the capabilities, features, and components of a computer system. It means it describes the *CPU speed, RAM storage, model, and other system components*. The computer specs are determined and checked usually when we have decided to purchase a new computer system or laptop, or we are a gamer. If we are already aware of what specifications are good, we will always have a fruitful deal of purchasing a new computer system.

Good Computer Specs

It is always good to keep in mind the points below when purchasing a new computer system or laptop. Especially if you are buying a PC or a laptop for the first time:

- **CPU:** It is the central processing unit of a computer system known as the **brain of a computer system**. A CPU is responsible for processing all operations and providing instructions to the computer. A better CPU leads to a fast processing system. There are three variety systems currently available in the market, which are **Intel i3 (remarked good), Intel i5 (remarked too good), and Intel i7 (remarked excellent)**. Intel i5 is sure to provide good speed and under budget, but Intel i7 is a little expensive and suitable for designers or gamers for designing software and gaming. A system with Intel i3 is the cheapest among the three.
- **System Screen:** The resolution or size of a screen can also have a good impact on our selection. A **13-inch** screen of a system (either laptop or PC) is the best screen size. You can also select a

high-resolution system but avoid purchasing a system whose screen size is below 13-inch.

- **RAM:** Acronym for **Random Access Memory**. It is the computer memory that is responsible for executing the programs and applications. It is present in **GigaBytes (GB)**. A system having **4GB or 8GB RAM** is preferred for good computer specs. Although **16GB and 32GB** RAM systems are also available, such huge RAM systems are required for high-end machines.
- **Storage Space:** There are two options for Storage Space. It can be either **Hard Disk Drive (HDD)** or **Solid State Drive (SSD)**. The use of HDD has become old and includes storing data on a disk, which is a slower process. SSD is the new storage type that stores data on a memory chip, and it is a faster process. Apart from these two storage types, if you are buying a computer for surfing, emails, and other online works, it is good to go for Cloud Storage that provides huge storage space for storing files, and it is the most secure place for your data. A good laptop specs must have at least **1TB for HDD** and at least **256GB for SSD**. The size of the SSD and HDD should not be less than the specified size.
- **Graphics Card:** If you are a gamer or imager editor, you should particularly be aware of the Graphics card a system holds. It is because, for such purposes, you should have an additional Graphics card, which is known as **Advanced Graphics Card**. In case you are not addicted to games, then the provided Graphics card is enough for you.

- **Power Supply Unit:** It is also an essential part of a computer system responsible for sharing power to all components of the system. If a PSU is of poor quality, provides unstable power, or overheats the device, all such issues may decline the lifetime of the system. But, if **PSU** is good with high-quality and branded, the system will operate efficiently. A good computer specs must have "**80+**" stickers, i.e., it should waste less than 20% of the total energy output, heavyweight PSUs that include better capacitors, larger cooling fans, heatsinks, and efficient enough to provide stable power stream to all other components of the system. The Power outputs for the desktop must be between **200 Watts to 1800 Watts**. Also, a PSU should be either single-rail that carries a single high-powered plus 12V rail or multi-rail that distributes power to more than one with 12V rail. One more thing to keep in mind is that the PSU of the system must have **hard-wired cables**, so there will be no additional connection requirements.

So, these points, one should keep in mind while going to purchase a new laptop or a PC and buy as per the budget and requirement.

SPECIFICATIONS OF DESKTOP COMPUTERS

Recommended Configurations

We recommend systems that meet or exceed the following specifications:

Processor (CPU): Intel Core i5 (10th generation or newer) or equivalent

Operating System:	Microsoft Windows 10 Professional x64 (free via Azure Dev Tools for Teaching. Restrictions apply)
Memory:	8 GB RAM
Storage:	512 GB internal Solid State Drive (SSD) or 1 TB internal HDD
Sustainability:	EPEAT Silver rating (preferably EPEAT Gold)
Monitor/Display:	24" LCD monitor
Network Adaptor:	802.11ac 2.4/5 GHz wireless adapter
Other:	Webcam, lock, external drive for backups

Minimum Requirements

We support the following minimum computer configurations.

Note: The following lists minimum requirements that allow for network connectivity and other basic functions. If you are planning on purchasing a new computer, please use the recommended configurations above.

Processor (CPU):	Intel Core i3 (sixth generation or newer) or equivalent
Operating System:	Microsoft Windows 10 x64 (free via Azure Dev Tools for Teaching. Restrictions apply.)
Memory:	8 GB RAM
Storage:	500 GB internal storage drive
Monitor/Display:	15" LCD monitor Other: 802.11ac 2.4/5 GHz wireless adapter