Case: The Define R6 that I chose is a stanard Mid Tower case that holds ATX motherboards. It comes with multiple fans attached to the case so that, with the pairing of CPU Cooling I chose, will help keep the system at a great running temperature. The side panel is acrylic so that any coloring wanted by the user can be seen. The front come with an optical drive bay and USB 3.0 plug-ins. It has enough space inside for any expansion that may be wanted in the future.

CPU: The i7-8700k is a great price to performance CPU right now. In benchmarks, this CPU out performs past i7 generations in different workloads. It’s 6 cores and 12 threads will handle most of the things that the ten new employees will want to use it for.

CPU Cooling: The NH-D15 will keep the CPU cool during any tasks the employees are working on. I went with standard air cooling, instead of liquid cooling, as the CPU will not be overclocked. Not being overclocked will produce less heat, so air cooling will be enough.

External Storage: I went with a 4tb portable HDD instead of a standard wall plug in for a few reasons. This portable HDD makes moving files between different computers easier and faster than moving a powered one between two spots. It also allows employees to carry their work with them if they decide to work at a different computer or work at home. 4tb will be plenty for any work that needs moving.

Headphones: The HD 280 Pro headphones will work for all the employees, regardless of their project. They are accurate with low, medium and high frequencies that the video editors will have no problems hearing and working with the audio. They are also comfortable so that any of the employees can wear them all day without their ears hurting.

Mouse: The G300s is a simple mouse, but powerful. It has an ambidextrous design so whether the new employees are left or right handed, they’ll be able to work with ease. 9 programmable buttons allow them to set any hot-keys they’d like to make the work more efficient and easier. The mouse also has RGB so the employee can choose their favorite color for lighting.

Memory: I went with 64GB of memory for the workloads. Dealing with 4k video editing, autocad, and huge programming files will quickly eat up memory. So 64GB of memory will allow use of those demanding programs without any problems. It’ll also allow for multitasking while working with those programs.

Monitor: The PD3200U is a high-end 4k monitor. These allow for 100% sRGV color space and have a CAD display mode. So whether you’re working on Autocad or editing the 4k videos, this monitor will perfectly do either one. It also has built in speaker, for when the editors need to listen to audio outside of the headphones.

Motherboard: For the motherboard, I chose the ASRock Z370 Killer. It supports both Wi-Fi and Wired internet connections. Has 6 SATA3 ports for possible upgrades in the future and Ultra M.2 sockets. Can use up to 64GB of memory at the speed of the memory I chose. It also has RGB lighting for the employee to choose their favorite color.

Keyboard: The Keyboard is a standard Mechanical Keyboard. The keys will last longer and are more durable than membrane keyboards. Also has RGB for employees favorite color.

Optical Drive: The Optical Drive I chose is an Ultra-HD bluray drive. This allows the video editors the ability to read and write Ultra-HD Blurays in 4k on their machine.

PowerSupply: The EVGA SuperNOVA 850 G2 is an 850 watt, 80+ Gold supply. With 850 watts, it will power the whole system with some extra in the event of upgrading down the line.

Storage Drive(OS): I chose the Samsung 960 Pro for it’s speed. This one will act as the main drive for the Operating System and any programs installed. It will significantly cut down on the time it takes to boot or run any program installed.

Storage Drive(Internal): The WD Black 6TB will act as the “storage” part of the computer. Any files that need to be saved, archived or are currently being worked on are here. The WD Black editions are the performance version of the WD drives. So that will cut down on time taken to access files. Also using this as a scratch disk for multiple programs won’t slow down as this drive has higher speeds and more cache than regular WD Blue drives.

UPS System: The UPS is 900W. This allows for 12 minutes, at half load, and 3 minutes, at max load, of battery power so that the employees can have enough time to save any open work and shut down.

USB Hub: The amazon Basics 7 port USB hub is just a standard powered hub. It has 7 USB 3.0 ports for any extra devices that need to be plugged into the computer.

Video Card(everyone else): The EVGA GTX 1080TI. With 3584 Nvidia Cuda cores, this GPU will handle almost anything you can use it for right now. You can offset editing 4k videos to use the GPU power, which speeds up rendering and editing far more than without. With the horsepower that this card delivers, programming will be no problem for this card either.

Video Card(AutoCad): I chose the Quadro P5000 for the AutoCad machines due to how it handles this task. The P5000 is made for AutoCad and the same type programs. For models and building, the P5000 will outperform the GTX 1080TI.

Webcam: The Logitech C920 is a standard 1080p webcam with a USB 2.0 interface.

Week 1:

* Research needed Hardware and Software
* Talk with vendors about component and software availability
* Research any compatibility issues

Week 2:

* Chose final part selection.
* Gather data to make presentation
* Make Parts list and detailed expense guide

Week 3:

* Present info to the Manager
* Once approved, present info and expense guide to the Financial Department.

Week 4:

* Order Parts
* Setup workstation area for computer installation

Week 5:

* Work with Networking Department to pre-setup all networking requirements for new machines.

Week 6:

* Build machines.
* Setup all stations for use when the new employees arrive.