The goal is to purchase a computer system that will not be obsolete or outdated equipment for at least 3-years. It must be covered by 3-years of warranty. And should provide a consistent user experience and have a standard of management capabilities.

**DESKTOP PC MINIMUM RECOMMENDED COMPUTER SPECIFICATIONS FOR STANDARD OFFICE USER**

- **BRAND:**
  HP, DELL Lenovo, etc., (the well-known names in the industry). *Do not purchase consumer (home, media, student) class notebooks.* Always purchase business class products for the longer life cycles, quality, support and manageability.

- **INTEL PROCESSOR:**
  - Core i5 (Minimum), Core i7 (Recommended), or, Core i9 (Maximum) (Intel 8, 9 & 10th generation processors)
  - AMD 3rd Generation processor & AMD 5000 Series processor

- **OPERATING SYSTEM:**
  - Microsoft Windows 10 Professional (As of June 2020, Microsoft ended supporting Windows 7)

- **APPLICATION SOFTWARE:**
  - Microsoft Office Professional 2019 (latest Full Version software). Either purchased via Microsoft ESD (Electronic Software Distribution) or Microsoft VLSC (Volume License Center for larger quantities)

- **ANTIVIRUS/SPYWARE/ADWARE/FIREWALL:**
  - 3-year license – Department of Information Technology procured Palo Alto Cortex XDR antivirus

- **Form Factor:**
  - Any form factor (chassis size) can be selected based on physical desk space requirements. Choices can be a Mini Tower, Small Form Factor, Ultra Slim Desktop, or All-in-One (CPU and Monitor are enclosed in one box).
  - *Tip:* Mini Tower and SFF will provide most expansion for non-standard requirements (*i.e.* PCIe cards).

- **System board:**
  - Required features:
    - TPM 1.2 -> 2.0 (This does Not matter and will confuse)

- **MEMORY:**
  - DDR4 Memory. 16GB is Recommended. 32GB for High End GIS or Adobe Premier Users

- **HARD DRIVE:**
  - Recommend standardizing on SSD (Solid State Drive with no moving parts) as opposed to SATA 7200RPM Spinning HDD – it is the best value upgrade out of all components today
    - Size ranges are 256GB, 512GB, 1TB, or 2TB
    - M.2 PCIe NVMe Class 40 Solid State Drive

- **DVD BURNER DRIVE:**
  - 8x speed. Choice between DVD Reader, DVD-Burner, Blue Ray Reader or Blue Ray Burner. Most new computers do not include these, so an External USB DVD Burner may need to be purchased separately.

- **VIDEO CARD:**
  - Integrated video is sufficient. *NVIDIA Quadro video cards recommended for GIS users*

- **WIRED OR WIRELESS NETWORK CARD:**
  - Gigabit LAN 10/100/1000 Network Card built onboard is normal
  - Most Laptops and All-In-One Desktops come standard with Wireless cards. Normal Desktops would need to purchase a wireless card separately if required. Plugging in a hardwire cable is faster and more secure, so wireless is optional

- **SOUND CARD:**
- Integrated Sound Card is acceptable

- **MOUSE and KEYBOARD:**
  - Standard mouse and keyboard. Optional wireless or Bluetooth keyboard if requested.

- **MONITOR:**
  - Standard ports would now be DisplayPort and HDMI
  - VGA and DVI are legacy ports, with DVI options relatively removed from the market
  - 24 inch/27 inch recommended

- **SPEAKERS:**
  - Internal desktop speaker should be sufficient for laptop and desktop all-in-one. Normal desktop will require to purchase speaker separately.

- **UPS:**
  - UPS (Uninterruptible Power Supply) is a battery that will allow your computer to remain powered on during Brown-outs, black-outs and power surges. A UPS will also protect your computer during thunder storms.
  - Major brands include: Tripp Lite, APC
  - Minimum: 500VA Universal Power Supply UPS with at least 6-oulets
  - Recommended: 1200VA Universal Power Supply UPS with at least 6-oulets and AVR

- **WARRANTY:**
  - 3-Year Parts and Labor Onsite. Recommend ADP (Accidental Damage Protection) for Desktop/workstations.