

# Technology Requirement by Academic Program

Below are the specific types of computers, software, and other technology-related items that are required by certain programs at Western Technical College. If you do not have access to the items listed for your program or if the ones you have do not meet the requirements, resources may be available. [Click here to submit a Student Resource Request \(Web\)](#).

## **Advanced Manufacturing**

### **Welding & Fabrication**

#### **Basic Welding:**

- Windows-based laptop or desktop computer with current operating system
- Current versions of Google Chrome or Firefox
- High-speed internet access

## **Agriculture & Natural Resources**

### **Agribusiness Science & Technology:**

- Windows-based laptop or desktop computer with current operating system
- Current versions of Google Chrome or Firefox
- High-speed internet access

## **Business & Professional Services**

### **Digital Photography:**

- DSLR or mirrorless camera with a lens that can be changed
  - Camera should have manual settings so student can control brightness and focus
  - Camera should be able to record video
  - Examples include: Canon R10, Nikon Z50, Sony A6400
- Memory card to record on camera
  - Recommendation: SanDisk Ultra SDHC UHS-I Memory Card – 32GB
- External hard drive to keep files available on multiple devices

## **Business & Professional Services**

### **Graphic Design:**

Students may choose either a Microsoft **OR** a Macintosh computer but **DO NOT** need both.

- **Microsoft Computer**
  - Windows 10 (64 bit) versions 1803 and later
  - Multicore Intel processor with 64-bit support
  - 16 GB minimum (32 GB recommended)
  - Graphics Card: NVIDIA GeForce GTX 1050 or equivalent, NVIDIA GeForce GTX 1660 or Quadro T1000 is recommended
  - 2GB of GPU VRAM
  - 6GB of available hard-disk space, additional free space required during installation (cannot install on removable flash storage devices)

## Program-Specific Software and Technology Requirements

- Additional disk space for disk cache (10GB recommended)
- Monitor: 1280x1080 or greater display resolution
- **Macintosh Computer**
  - Macintosh computer: 16GB RAM, 2GB VRAM, a monitor capable of 1920x1080 resolution, and a 1TB hard drive; macOS versions 10.13 and later
  - Multicore Intel processor with 64-bit support
  - Graphics Card: NVIDIA GeForce GTX 1050 or equivalent; NVIDIA GeForce GTX 1660 or Quadro T1000 is recommended
  - 6GB of available hard-disk space, additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash storage devices)
  - Additional disk space for disk cache (10GB recommended)

## **Business & Professional Services**

### **Legal Studies/Paralegal**

#### **Legal Studies/Paralegal Post Baccalaureate:**

- A Windows laptop is recommended for all students enrolled in LSPL. Failure to have a Windows-based device may result in difficulties completing assignments and exams that use specific forms and software programs. Mac computers, Chromebooks, or tablets often have compatibility issues. If you do not have a windows-based laptop, there are computer labs available on campus.
- External web camera with microphone (*required to ensure integrity of testing to satisfy the ABA*)
- High-speed internet access

## **Business & Professional Services**

### **Medical Administrative Professional**

#### **Health Office Assistant, Health Office Professional:**

- Windows-based laptop or desktop computer with current operating system. *Note: Chromebook and Mac computers do not operate all the applications required in this program.*
- Web camera with microphone (usually built into newer laptops or can be purchased separately)
- Current versions of Google Chrome or Firefox
- High-speed internet access

## **Design & Construction Technology**

### **Architectural Technology:**

If you want to work on assignments outside the classroom/lab, you should have a laptop or desktop computer as described below.

#### **Remote Desktop Option:**

- Use remote desktop connection into assigned classroom computer. This uses your home computer's monitor, keyboard and wheel mouse to remotely operate a classroom computer.
- Requirement: High speed internet access, Supported Windows or Mac operating system.
- Recommendation: 1920 x 1080 minimum resolution monitor, 24" minimum size.

*Potential Issues:*

## Program-Specific Software and Technology Requirements

- Relies on a high-speed internet connection, if internet isn't fast enough there can be a frustrating lag.
- Sometimes classroom computers lock up or are powered off by mistake and need to be restarted by PC Services.
- Only one user can be on at a time. Potential conflict if student's assigned classroom computer is in use by someone else in the classroom, or PC Services remotely for software updates.

### **Personal Computer Option:**

- These recommendations apply if students want to install the design and drafting software used in the program on their personal computer.
- System Recommendations are based on Autodesk's recommendations for Revit 2024. [System Requirements for review 2024 Products \(Web\)](#) Revit is the Building Information Modeling software used in terms 2A-4B.

*(Please note that Revit software is not available in the Macintosh operating system. If you need to use a Macintosh with Revit, you will need to utilize the Remote Desktop Option above or have software installed on your computer that allows Windows software to run.)*

## **Education & Human Services**

### **Early Childhood Education:**

- Laptop or desktop computer with current operating system (PC or Mac)
- Current versions of Google Chrome or Firefox
- High-speed internet access

## **Education & Human Services**

### **Foundations of Teacher Education:**

- Laptop or desktop computer with current operating system (PC or Mac)
- Current versions of Google Chrome or Firefox
- High-speed internet access

## **Education & Human Services**

### **Human Services Associate:**

- Laptop or desktop computer with current operating system (PC or Mac)
- Current versions of Google Chrome or Firefox
- High-speed internet access

## **Health Sciences**

## **Liberal Arts**

## **Public Safety**

## **Science, Technology, Engineering & Mathematics (STEM)**

IT Computer Support Specialist

IT Computer Support Technician:

## Program-Specific Software and Technology Requirements

- Windows 11 Operating system; less than 5 years old with an Intel i5 processor
- Memory: 8GB RAM or greater
- Hard drive: 500GB or greater (SSD recommended)
- Monitor: 15" 720p (Two monitors are recommended)
- Web camera

## **Science, Technology, Engineering & Mathematics (STEM)**

### **IT Cybersecurity & Network Administration**

#### **IT-Network Technician:**

- Windows 11 Operating System
- CPU: Intel Core i5/5 or AMD Ryzen 5 (or better)
- Memory: 16 GB RAM or greater (32 GB is awesome, 64 GB is excellent)
- Fixed Disk: 500 GB or greater (1 TB is better, ensure it is SSD and not HDD. Also, NVMe is better than SATA)
- Monitor: 24 or 27", 1080p (1440p is better) (Two monitors are recommended)
- Web Camera and USB Microphone

## **Science, Technology, Engineering & Mathematics (STEM)**

### **IT-Software Development with Applied AI:**

- Windows 11 Operating system; less than 5 years old with an Intel i5 processor OR recent M-series Mac
- Memory: 8GB RAM or greater
- Hard drive: 500GB or greater (SSD recommended)
- Monitor: 24" 720p (Two monitors are recommended)
- Web camera

## **Science, Technology, Engineering & Mathematics (STEM)**

### **IT-Data & Data Analytics Specialist:**

- Windows 11 Operating system; less than 5 years old with an Intel i5 processor
- Memory: 8GB RAM or greater (16GB recommended)
- Hard drive: 500GB or greater (SSD recommended)
- Monitor: 24" 720p (Two monitors are recommended)
- Web camera

*This program has a set of 10 laptops that can be checked out to students if they do not meet these requirements otherwise.*

## **Science, Technology, Engineering & Mathematics (STEM)**

### **Internet of Things (IoT) Integration Specialist:**

- Windows 11 Operating system; less than 5 years old with an Intel i5 processor
- Memory: 8GB RAM or greater
- Hard drive: 500GB or greater (SSD recommended)
- Monitor: 15" 720p (Two monitors are recommended)
- Web camera

## **Transportation**