PLTW Computer Science 2023- 2024 Computer Specifications

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The PLTW curriculum utilizes powerful, industry-based software. To prepare for a successful school year, please work closely with your IT department to ensure your computer hardware meets or exceeds the specifications below.

Distance Learning: To accommodate distance learning environments, students may use a Chromebook in place of the recommended desktop or laptop. A Chromebook is not recommended for the teacher's computing platform.

Please note, we do not support the following software solutions for use with the PLTW curriculum:

- Open Office
- Virtual Desktop Environments
- Internet Explorer for accessing myPLTW

PLTW Computer Science Specifications

Computer Science Course	PC/Windows	Mac	Chromebook	Android Tablet	iPad/IOS
Computer Science A	✔	✔	DL		
Computer Science Essentials	✔	✔	DL	✔	✔
Computer Science Principles	✔	✔	DL		
Cybersecurity	✔	✔	DL		

- Computer Science Essentials requires Android tablets or iPads. Each teacher needs an Android tablet or iPad and no more than a 2:1 ratio for students.
- All courses require each teacher and student to have a PC or Mac laptop or desktop computer.
- The PLTW Computer Science curriculum only supports iPads for MIT App Inventor
- Chromebooks can be used as a fallback option in case of Distance Learning. Please note that some content in the curriculum has been modified to accommodate the Distance Leaning path. More information regarding Distance Learning is available in the Teacher Guide.

PLTW Computer Science Computer Specifications		
Specification	**Minimum**	**Recommended (not required)**
Processor	Intel® or AMD processor 2.0 Ghz +	Intel® or AMD processor 2.3 Ghz +
RAM	4 GB +	12 GB +
Hard Drive	250 GB +	250 GB +
Video *	Graphics 128 MB +	Graphics 256 GB +
Display	We recommend a 21" or greater external monitor per computer for coding and viewing small text.	We recommend a 21" or greater external monitor per computer for coding and viewing small text.
Operating System	Windows 7, Windows 8.1, or Windows 10 64 bit operating system. Apple device with MacOS 10.13+.	Windows 7, Windows 8.1, or Windows 10, 64 bit operating system or Apple device with MacOS 10.13+.
Network*	Must have wireless network connectivity	Must have wireless network connectivity
[Other Basic Software **(complete software lists here)**](#)	• We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW. • Need a working version of Oracle Java v17+ installed and enabled for CSA only.	• We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW. • Need a working version of Oracle Java v17+ installed and enabled for CSA only.

PLTW Computer Science Android Tablet Specifications (CSE ONLY)	
Processor	1 Ghz +
RAM	1 GB +
On Board Storage	16 GB +
Screen Size	7 inches +
Operating System	Android v4.4.2 +
Network*	WIFI enabled (cellular/LTE not required); Must have wireless network connectivity
Other Required Embedded Hardware	• Front or Rear facing camera (having both is recommended) • Accelerometer • Microphone • Bluetooth® • USB Drivers must be available for the device

PLTW Computer Science iPad Specifications (CSE Only)	
Supported Models	Models that can update to iPadOS 13 or higher. See list of models.
Screen Size	7.9 inch +
On Board Storage	16 GB +
Operating System	iOS 13 + (MIT App Inventor may work on iPadOS less than 13.0)
Network	WIFI enabled (cellular/LTE not required); Must have wireless network connectivity*

PLTW Computer Science Chromebook Specifications (Distance Learning)	
Screen Size	11 inch +
Processor	1.0 Ghz+
RAM	4 GB +
On Board Storage	16 GB +
Graphics	Integrated
USB Connectivity	Must have a USB port and drivers
Operating System	Chrome OS Current version (updated continuously)
Network	WIFI enabled (cellular/LTE not required); Must have wireless network connectivity*
Bluetooth	Student and teacher devices must be Bluetooth enabled

* Under many circumstances, you may need an 802.11 wireless router in the classroom for Android tablets and computers. Please test your unique classroom environment to ensure adequate wireless access is in place**.** If you do need to make a wireless router purchase, please verify the selected router will allow adequate simultaneous connections by contacting the manufacturer and discussing the number of devices that will be concurrently used.

Network Allow list: Please see our Allow list for ports and websites here. Following the Allow list ensures that teachers and students can access and use the software, websites, and applications required to offer PLTW coursework.

Other PLTW Computer Science Hardware:
Projector: Each classroom needs a digital projector with screen (or equivalent classroom display hardware) with appropriate cables, adapters, or software to connect to the teacher device.