

## PLTW Gateway 2025-26 Computer Specifications

## February 2025 v1

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.

To implement any of the PLTW Gateway units, each student and teacher must have a PC, Mac, or Chromebook. The matrix below shows the supported hardware for each unit. In addition, the App Creators unit requires an Android tablet for every two students. The list of software needed for PLTW coursework is <a href="here">here</a>.

## **PLTW Gateway Specifications**

PLTW Gateway Unit	PC/Windows	Mac	Chromebook	Android Tablet	iPad/IOS
App Creators*	<b>√</b> *	<b>√</b> *	<b>√</b> *	<b>√</b> *	<b>√</b> *
Automation Robotics	✓	✓	✓		
Computer Science for Innovators and Makers	✓	✓	✓		
Design and Modeling	✓	✓	✓		
Energy and the Environment	✓	✓	✓		
Flight and Space	✓	✓	✓		
Green Architecture **	<b>√</b> **	DL	DL		
Magic of Electrons	✓	✓	✓		
Medical Detectives	✓	✓	✓		
Science of Technology	✓	✓	✓		

<sup>\*</sup>The App Creators unit requires each student and teacher to have a PC, Mac, or Androidenabled Chromebook with access to the Google Play store **AND** an Android tablet or iPad. Amazon Fire tablets are not compatible with App Creators. It is highly recommended that students have a second display/monitor for use with their PC or Mac to allow for simultaneous programming and curriculum access.

<sup>\*\*</sup>The Green Architecture unit requires the use of Autodesk Revit software, which requires more substantial computing hardware than all other PLTW Gateway units. Please refer to the Green Architecture PC and Mac specifications at the **bottom of this document**.





PLTW Gateway Computer Specifications			
Specification	Minimum	Recommended	
Processor	Intel® or AMD processor 2.0 Ghz +	Intel® or AMD processor 2.3 Ghz +	
RAM	8 GB +	12 GB +	
Hard Drive	250 GB +	250 GB +	
Video	Graphics 512 MB +	Graphics 1 GB +	
Operating System	Windows 10 or Windows 11 64 bit operating system. Apple device with macOS 10.13+ and	Windows 10 or Windows 11 64 bit operating system or Apple device with macOS 10.15+ and	
Network	Must have network connectivity (wireless and/or wired)	Must have network connectivity (wireless and/or wired)	
Other Basic Software (complete software lists here)	We We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW.	We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW.	

PLTW Gateway Android Tablet Specifications		
Screen Size	7 inch +	
On Board Storage	16 GB +	
Operating System	Android v4.4.2 +	
Network	WIFI enabled (cellular/LTE not required); Must have wireless network connectivity*	
	Connectivity	

PLTW Gateway iPad Specifications		
Supported Models	Models that can update to iPadOS 15 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 iOS less than 13.0)	
Network	WIFI enabled (cellular/LTE not required); Must have wireless network	
	connectivity*	

PLTW Gateway Android-Enabled Chromebook Specifications			
(Click <u>here</u> for Goo	(Click <u>here</u> for Google Education Site)		
Screen Size	11 inch +		
Processor	1.0 Ghz+		
RAM	4 GB +		
On Board Storage	16 GB +		
Graphics	Integrated		
Camera	Must have an onboard camera, front facing or world facing		
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*
Android App Compatibility	We only support Android-enabled Chromebooks for the App Creators Course.  All other Gateway courses can use any Chromebook. The list of makes/models of Android-enabled Chromebooks is maintained by Google <a href="here">here</a> .

Green Architecture ONLY Computer Specifications			
Specification	Minimum	Recommended	
Processor	Intel® or AMD processor 2.0 Ghz +	Intel or AMD four+ core processor, 3.0 Ghz +	
RAM	8 GB +	32 GB +	
Hard Drive	500 GB +	1 TB +	
Video *	1 GB + dedicated RAM, with 29 GB/S Bandwidth and DirectX 11 compliant or higher	4 GB + dedicated RAM, 4 GB GPU with 106 GB/S Bandwidth and DirectX 11 compliant or higher	
Operating System	Windows 10 or Windows 11 64 bit operating system or MAC device with macOS 10.13 +. Bootcamp required with one of the above Windows operating systems.  NOTE: Not all MAC devices support Bootcamp or a parallel OS. Take this into consideration when purchasing new machines.	Windows 10 or Windows 11 64 bit operating system or MAC device with macOS 10.15 +. Bootcamp required with one of the above Windows operating systems.  NOTE: Not all MAC devices support Bootcamp or a parallel OS. Take this into consideration when purchasing new machines.	
Network	Must have network connectivity (wireless and/or wired)	Must have network connectivity (wireless and/or wired)	
Other Basic Software (complete software lists here)	We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW.	We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW.	

<sup>\*</sup>IMPORTANT: Do not use Basic Intel graphic chipset or other chipsets with shared memory for video display. See the Autodesk certified graphics hardware page <a href="here">here</a> as reference tool in selecting graphics hardware.

**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.

**Network Allow list:** Please see our Allow list for ports and websites <u>here</u>. 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 Gateway 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.

**Printer**: Each classroom will need access to a single medium duty printer for coursework:

Print speed: Up to 35ppm

Resolution: 600 x 600 dpi minimum, Color not required

Memory: 128 MB min Paper size: Letter, Legal

Network ready

