

Technical Requirements for Principles of AI

This document describes the hardware, software, and network requirements needed for PLTW Principles of AI (PAI). It is divided into the following sections:

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Hardware Requirements

A computing platform is required for each teacher and for each student taking a computer science course. A desktop, laptop, or Chromebooks are the preferred platforms. **This course also requires access to a Large Language Model (LLM). See the Course Specific Software Sections for details**

Computer Specifications	Minimum	Recommended
Processor	Intel® or AMD processor 2.0 GHz +	Intel® or AMD processor 2.3 GHz +
RAM	8 GB +	12 GB +
Hard Drives	250 GB +	250 GB +
Video	Graphics 128 MB +	Graphics 256 MB +
Operating System	Windows 10, Windows 11 64-bit, or Apple device with macOS 13+	
Misc.	External mouse Headphones or earbuds	
Display	External Monitor of 21" or greater Laptop screen of 14" or greater	

Chromebook Specifications

Minimum

Processor	1.0 GHz +
RAM	4 GB +
Screen Size	13 inch +
On Board Storage	16 GB +

Operating System	Chrome OS current version (updated continuously)
Network	Wireless enabled (cellular/LTE not required)
Misc.	Graphics Integrated Bluetooth® USB port and drivers

Each classroom must have a digital projector with a screen (or equivalent classroom display hardware) including the appropriate cables, adapters, or software to connect to the teacher device.

Note: Other equipment and supplies required for your classroom can be purchased from the PLTW Store. Please refer to the [PLTW Investment Tool](#) for more information.

Allow Lists

All teacher and student computers must have access to the internet. To comply with the Children’s Internet Protection Act (CIPA), an unrestricted internet is prohibited at school sites. IT departments and/or school districts configure *allow lists* which contain approved domains, URLs, and IP addresses that school computers can access.

Collaborate with the appropriate group to confirm the allow list has been configured for all teacher and student computers.

NOTE: The Allow List below is a comprehensive list for all courses in the computer science program.

[General PLTW and CS Program Allow List.](#)

Course-Specific Software Requirements

The most important requirement is to have access to a Generative AI tool that accesses a Large Language Model (LLM), such as ChatGPT, Gemini, or Co-pilot.

Students and teachers are required to have access to one of these LLM's to do the course. **Before signing up for training**, please ensure that state and local policies allow students and teachers to use Large Language Model AI systems.

These tools will guarantee the best experience and most ideal outcomes for the activities, projects, and problems (APBs) in this course. Other AI tools could work for some APBs but **do not** guarantee the whole course experience.

Lastly, PLTW will not be providing direct or indirect access to Large Language Models for this course. PLTW will not be giving funds for any type of premium access to those LLM's.

Software Requirements

Your IT department or your school district usually installs software on school computers. Collaborate with the appropriate group to confirm the required software has been installed for all student and teacher computers, including the computer you will be using during core training.

Common Software Requirements

The following are the software requirements for all courses in the CS pathway.

Chrome or Firefox browser, latest version

End-of-Course Assessment software:

[Installation Guide for Windows](#)

[Installation Guide for Mac](#)

[Installation Guide for iPads](#)

[Installation Guide for Chromebooks](#)

Questions?

Our friendly PLTW Solution Center team members are here to answer any of your questions. Call us at 877.335.7589 for live, one-on-one support Monday through Friday 7:00 a.m.–9:00 p.m. ET. You can also email us at solutioncenter@pltw.org.