PLTW Core Training Computer Requirements and Software | Aerospace Engineering

Welcome to PLTW Core Training. We're excited you have decided to become a PLTW Teacher and want to ensure you feel prepared to attend Core Training. One key step to successfully starting your Core Training experience is to arrive prepared with the hardware and software required for your courses. Below you will find the computer hardware requirements, links to necessary software, and a technology preparation checklist designed specifically for this course.

PLTW Core Training Preparation Check List

o   Work with your school or district's IT department to acquire the device(s) you need, add the required websites to your allow list, and install the software needed for the course.

o   Once you have downloaded the software, be sure to open the software and use it while on your school or district site to be sure that everything is working properly.

o   Request administrator rights to your device. While this is not always possible, it's very useful to have if you need help troubleshooting issues during Core Training.

o   Complete all software tutorials in the prerequisite materials.

Software Required

o   **Aery 32**
o   **Ansys STK**
o   **Autodesk Inventor Professional**
o   **Gas Turbine Analysis**
o   **Graphical Analysis**
o   **Google Earth Pro**
o   **OpenRocket**
o   **VEXcode V5**

Hardware Required

1. Laptop which meets or exceeds the specifications below, and has all required software appropriately installed
2. External mouse use with Inventor.
3. Device capable of taking photos and videos such as a digital camera, smartphone, tablet, or laptop with webcam
4. Headphones or earbuds to plug into computer

PLTW Engineering Aerospace Engineering Computer Specifications		
Specification	**Minimum**	**Recommended**
Processor	Intel® or AMD processor 2.0 Ghz +	Intel® or AMD processor 3 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	4 GB + dedicated RAM, 4 GB GPU with 106 GB/S Bandwidth and DirectX 11 compliant
Operating System	Windows 7, Windows 8, or Windows 10, Windows 11 64 bit operating system or MAC device with OSX 13 +. Bootcamp required with one of the above Windows operating systems. **NOTE: MAC devices made with the new M1 chip cannot run Bootcamp or a parallel OS. Take this into consideration when purchasing new machines.**	Windows 7, Windows 8, or Windows 10, Windows 11 64 bit operating system or MAC device with OSX 15 +. Bootcamp required with one of the above Windows operating systems. **NOTE: MAC devices made with the new M1 chip cannot run 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. • Microsoft Office, 2016 or later for iComponents, thread customization, and spreadsheet-driven designs in Inventor	• We recommend the most current version of Firefox or Chrome for optimal utilization of myPLTW. • Microsoft Office, 2016 or later for iComponents, thread customization, and spreadsheet driven designs in Inventor

*Please note, you should not use Basic Intel graphic chipset or other chipsets with shared memory for video display. See the Autodesk certified graphics hardware page **here** as reference tool in selecting graphics hardware.

Core Training Technology Preparation Dos and Don'ts

- Do give yourself plenty of time before training to acquire the right device(s), whitelist the suggested websites, and install needed software. We suggest handling this a few weeks before training or before your school year ends.

- Do open and test the software before you arrive onsite for training to be sure it is working. At times, participants find that they are unable to open software if they try to open it for the first time while they are off their school or district's network. To prevent this, open the software while on your network and test it.

- Do try to acquire administrative rights to your device. While this is not always possible, it's extremely helpful if there are any issues while you're at training.

- Do complete all prerequisite training, including any software tutorials.

- Don't use a brand-new or unopened device that you've never logged into before.

Allow list: Please see our network allow list for ports and websites here. Allowing websites in accordance with this ensures that teachers and students can access and use the software, websites, and applications required to offer PLTW coursework.