

# Heinz College Laptop Requirements

March 2022

## **Policy Statement**

All Heinz College students enrolled in a full-time degree program **are required** to have a laptop at the beginning of the semester through graduation.

It is **highly recommended** that part time students have a laptop at the beginning of the semester or when the degree program requires the use of a laptop. Some courses may require the use of a laptop. Please read the syllabus for each course for the requirements.

## **Minimum Hardware Specifications**

To be successful at Heinz and minimize frustrations with technology, your laptop must meet the minimum hardware specifications below. We **strongly** recommend you purchase a laptop that meets the **recommended** specifications.

	<b>Minimum</b>	<b>Recommended</b>	<b>NOT recommended and/or not supported</b>
<b>Processor</b>	8th Generation Intel Core i5 dual core or better or AMD Ryzen Pro	11 <sup>th</sup> Generation Intel Core i5 quad core or better. AMD Ryzen Pro.	Pentium ULV processor; Intel Atom, ARM or like processor
<b>RAM</b>	8 GB (Policy Track)	16 GB or more (IS/IT Track)	Less than 8 GB
<b>Hard Drive</b>	256 GB (Policy Track)	512 GB or more (IS/IT Track)	Any drive 128GB or less
<b>Wireless</b>	802.11n		
<b>Operating System</b>	Windows 10, 11 Pro\Education: 64 bit (English Language) or greater.	Windows 10, 11 Pro\Education, Enterprise 64 bit (English Language) or greater	Linux (all flavors), OS in non-English language, Windows 7, 8, 10S, Home.
<b>Warranty</b>	1 years	2-3 years	None

**Unsupported Equipment:** iPad, iPhone, smart phones or like devices; Kindles, Nook, netbooks, and tablet PCs without keyboards (just to name a few). Any

questions about supported equipment can be emailed to [heinz-computing@andrew.cmu.edu](mailto:heinz-computing@andrew.cmu.edu).

## Laptop Older than 2 years?

---

If your laptop is two years old, it might meet the specifications listed above. It depends on whether you bought a gaming or a basic productivity laptop. If your computer is 3 or more years old, it likely will not meet the specifications. If your laptop is 4 years old, it is highly unlikely to meet the specifications.

Laptop Age	Recommendation	Actions
0-1 Year old	Likely meets the recommended specifications	Compare the computer specifications with the guidelines above.
2-3 Years old	May meet recommended specifications.	Compare the computer specifications with the guideline above. Consider buying a laptop that will meet the recommendations.
4 Years or older	Does not meet recommended specifications.	Purchase a laptop that will meet the minimum recommendations.

We do not have physical computer labs for public use in Hamburg Hall. Your laptop is your primary computing platform. There are computer labs in other buildings on campus. However, **due to COVID-19, all labs are closed**. This **MAY** change by the time the fall term begins. In order for you to be successful, please review the laptop requirements guideline prior to your arrival.

## Operating System

---

### Windows

We only support Windows 10 Professional\Education. We do not support Windows Vista, Windows 8 or **any** version of Windows Home or Windows 10S. Many core course applications will NOT run on Home Editions of Windows. If you are unable to buy a laptop with a supported operating system, we suggest one of the following:

- You can [upgrade to a supported OS at no charge](#) once you are on campus.
- Dual boot your computer so you can choose to run Windows 10,11 at startup. This option is for advanced users only. Please be advised that data loss can occur while attempting to setup your computer for dual boot and that all precautions including backups should be taken.
- Virtualization: See virtualization section below.

## Mac OS X

While the M1 Mac's can be used for many courses, there are some software packages that will not work on Mac OS. Particularly ArcGIS Pro as it's Windows only. Students that select Mac OS will need to have the resources to create a Window VM on their laptop with at least 6GB of RAM and allocate 250GB of disk space for a Windows partition. Please note that **at the time of this writing**, there are **no supported FREE ways to do this** as Boot Camp does NOT work on M1 processors.

We provide limited support for Mac OS. If you need assistance setting up a local virtual machine or Boot Camp, please email [it-help@cmu.edu](mailto:it-help@cmu.edu)

You can download Windows from [Campus Azure Dev Tools](#)

## Virtualization

This section is optional.

VMWare \*may\* release a supported free version of Fusion for the M1 in the coming year. If you chose to purchase an M1 based Mac, please be aware that **you will face some challenges** in some courses with software compatibility and virtualization. At the time of this writing, there are no supported virtualization options for M1 based Macs.

If virtualization becomes available, the host laptop must have at least 8 GB of RAM (16+ GB RAM recommended) for this option to work most effectively. If you install Windows 10,11 Pro\Education in the virtual environment, you should designate at least 4GB of RAM(6+GB recommended).

## Operating System Language

---

Some of our course software expects to see **English** as the default operating system language and will fail to install or function correctly if other languages are used as the default. We are unable to support laptops that are not set to the English language.

## Ordering a Laptop from Carnegie Mellon

---

You can order a laptop from the Carnegie Mellon computer store. They offer a wide variety of manufacturers at educational discount pricing. [University Computer Store](#)

## **Consulting Services**

---

Heinz Computing Services will attempt to answer any question you have about your current computer or if you are buying a new computer. Send your questions to [heinz-computing@andrew.cmu.edu](mailto:heinz-computing@andrew.cmu.edu).