

### **Suggested for Students:**

# LAPTOP REQUIREMENTS VISUALIZATION

#### STUDENT NEEDS

Visualization requires that all incoming students have a serviceable laptop computer and suggests the following minimum system configuration.

Requirements for a useful system vary from program to program, these suggestions supersede College requirements and apply only to students in Visualization degree programs. It is important to note that no student will be denied admission to the school because of an inability to provide a laptop.

It is recommended that students enter the Visualization program with a laptop capable of high performance.

Remember, the major advantage of a laptop is its portability, not its computational power. A number of students maintain a separate, more powerful desktop system for use outside the classroom environment.

#### PC or MAC?

Both platforms are used in the program. Both platforms have advantages and disadvantages. For Game Development and Animation Production, PCs are preferable, because many of the programs are either made for PC usage, or are only compatible with PCs. The Design focus often uses Adobe products, which were originally created for use on a Mac. Students will have the opportunity to use both platforms in the program.

**NOTE:** As much memory, graphics card performance and hard drive as you can afford, above the minimums listed, will be a benefit. Increased memory and graphics performance is more important than exceeding the minimum spec on CPU.

- minimum screen size of 13"
- on-board camera
- external 3 button mouse
- wi-fi
- A 32GB USB flash drive

## SPECS Minimum Recommended

WINDOWS	OS: Windows 10 (64bit, version 1909)	OS: Windows 11 (64bit)
	CPU: • Intel Core i5 • AMD Ryzen 5	CPU: • Intel Core i9 • AMD Ryzen 9
	GPU: Nvidia Geforce GTX 1060 Nvidia Quadro P2200 AMD Radeon RX 580	GPU: Nvidia Geforce RTX 3080 Nvidia Quadro RTX 6000 AMD Radeon RX 6800 XT
	VRAM: 8GB	VRAM: 16GB
	RAM: 32GB	RAM: 64GB or 128GB
	Hard Drive: SSD type with 500GB of free space	Hard Drive: SSD type with 1TB of free space
MAC OS	Model:  MacBook Pro 2021  Mac Pro 2021	Model:  • MacBook Pro 2023  • Mac Pro 2023
	OS: Mac OS 11 (Big Sur)	OS: Mac OS 12 (Monterey)
	CPU: Apple M2 Pro Max	CPU: Apple M3 Pro Max
	GPU: • AMD Radeon Pro 5600M • AMD Radeon Pro Vega 56	
	RAM: 32GB	RAM: 64GB
	Hard Drive: SSD type with 500GB of free space	Hard Drive: SSD type with 1TB of free space



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#### **EXTERNAL DEVICES**

There are several external devices that are useful at various times throughout the program. **These are not required** but increase productivity.



Graphic design classes, digital painting, digital sculpting, 3D surfacing, and related classes frequently use a **Wacom-style tablet** as an input device which allows pressure sensitive input.



A **500 GB external USB hard drive (minimum)** is very useful for backup and to transfer large volumes of data between personal and University machines. Depending on the type of connector on the laptop for external display, **an HDMI adapter** may be very useful



**If the laptop is the primary system**, there are additional devices that can make the system more productive. **An external keyboard** and **full sized monitor** actually increase thespeed with which the system can be used. **A spare battery** can also be useful.

## SOFTWARE REQUIREMENTS

Certain classes will require students to use industry standard commercial software.

Many software providers do have free, or low cost, options for students, some of which can be provided for personal machines by the program. Consider waiting until the need exists so that the latest version of the software can be obtained.

#### **EXISTING PROGRAM RESOURCES**

The Program maintains laboratories used for both teaching and general access outside of class hours. These labs contain Mac, Windows and LINUX systems with software used in the various courses and are available after hours on a first come-first served basis. A variety of printers, scanners and other input/output devices located throughout the program and College are available to the student.

Computer Labs for Visualization can be found in real time via this map:

https://tamu.sassafrascloud.com/maps/



Click the URL or scan the QR code to get access to the real-time Viz computer location map.