

School of Design Laptop Requirement for New Majors; Visual Communication Design (BSVCD) Fall 2022

The School of Design requires that each incoming Design student own a laptop with graphics capabilities, and that they be prepared to purchase the software programs used in courses.

Students should budget for the purchase of the necessary hardware and software the way they would books and other supplies for class. *Educational purchase discounts for both hardware and software are available at the [SFSU student store](#), and through various online vendors.*

It is best to begin the program with a good graphics computer that can support demanding software such as Adobe Creative Cloud and/or SolidWorks, but you may be able to hold out until your second semester in the program with a laptop that can handle still images and presentation applications. Below are details of the hardware and software requirements for all Vis Com students.

Minimum Hardware Requirements for BSVCD Majors:

A MacBook Pro (Retina display or the NVIDIA graphics card) is recommended for this major because the Apple OS and hardware are the standard in the visual communication design / graphic design industry.

Note: The Microsoft Surface is not a laptop. Please do not purchase a Surface hoping it has the graphics cards and processing capabilities to run graphics software. The Surface cannot run our required software. We recommend you purchase a MacBook Pro.

REQUIRED:

- **Operating System (either one of the following):**
 - Apple OS: either macOS 12 (Monterey), OS 11 (Big Sur), or OS 10.15 (Catalina)
 - PC: Windows 10 (64-bit)
- **Processor:**
 - Minimum CPU: Apple Native, Intel, or AMD Quad-Core Processor
 - Recommended: Apple M1 or M2, Intel Core i7 or better, AMD Ryzen 9 or better
- **Memory:** Minimum of 16 GB of Unified Memory or minimum 16 GB RAM (random access memory). The more memory the better. 32 GB is recommended (note: After Effects requires 16 GB). We recommend you get as much RAM as you can.
- **Storage:** 500GB+ 7200RPM hard disk or 256GB+ solid-state drive (SSD). SSD will significantly improve performance. The more storage you can afford, the better.
- **Graphics Capabilities:** A MacBook Pro with Retina Display and at least 4GB of VRAM will provide suitable performance. (Note: the more VRAM your GPU supports the more future proof your machine will be, a gaming GPU like GeForce RTX 3080 Ti supports 12 Gb of VRAM)
- **A 2-button mouse is required at a minimum** (trackpads on the laptop are neither accurate or ergonomic). Students may also use a tablet (such as Wacom).
- **Backup and Storage:** You will be making a lot of large files that can quickly fill up your hard drive and can seriously affect the performance of your laptop. **All students are required have at least an online ("cloud") storage/backup that is synced daily.** All students have a free Box account: <https://sfsu.app.box.com/>. This is a safe and secure way to store and backup your work. Other options include [Google Drive](#) or [iCloud](#) (both sync automatically and have low fees). We strongly recommend you purchase an external drive as well for secondary backup ([La Cie](#) or [Seagate](#) are good brands). See the ["3-2-1 Backup Strategy"](#) for more information.

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Strategic Extras:

- **Second monitor** This is really helpful for “window-heavy” software such as After Effects, Premier, Unity, Blender, etc. when you work at home.
- **USB flash drive** for exchanging files with others, loading files onto printers and presenting work. Note: these are not stable enough to function as backup drives.
- **1 or 2 TB external drive** for secondary backup ([La Cie](#) or [Seagate](#) are good brands). See the [“3-2-1 Backup Strategy”](#) for more information.
- **Spare AC Adaptor to leave at home** (most frequently seen object in our lost and found)
- **Extended Warranty** such as Apple Care
- **Insurance policy coverage for your laptop added to your home or renter’s insurance.**
- **Laptop security cable** to tether your machine wherever you are working at school, assuming laptop has a Kensington-type security slot.
- **External battery or power pack** (10000-20000 mAh) for charging laptops and smartphones.

Software:

REQUIRED:

Basic Productivity Applications:

All SFSU students have access to free Microsoft Office: <https://its.sfsu.edu/service/office365students>
You could use other applications that perform word processing, presentation/slideshow, spreadsheet, etc. such as **Apple iWorks**, or through cloud-based software like **Google Docs**.

Software Required for Visual Communication Design:

- **The Adobe Creative Cloud** suite (free to Design students, see below) including Photoshop, Illustrator, InDesign, Acrobat Pro, XD, After Effects, Lightroom, Premiere, etc.

Students will also use:

- **Unity** Development Platform (available free)
- **Blender 3D** (free license available)
- Students also use prototyping software such as **Figma** (free), **InVision Studio** and **Sketch** (we have reduced-fee and free licenses available for students – your instructors will help you with these).

Most of the software needed will run fine on either Windows or Mac platforms assuming you have met the basic system requirements of the Adobe Creative Suite programs and have graphics hardware that is in line with our basic recommendations. Adobe After Effects is the most challenging for the GPU, CPU, and RAM.

NOTE: some of the most widely used user prototyping, font authoring and surface-prototyping software only run on Macs.

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Registered students in the School of Design have access to free Adobe Creative Cloud licenses. This is for declared Majors and Minors only. The process for accessing Adobe software for installation on personally-owned computers is <https://athelp.sfsu.edu/hc/en-us/articles/360034974694-How-to-install-Adobe-applications-on-personal-machines>. Please log-in with your SFSU credentials and you should then have immediate access to the creative cloud programs.

If you are already using your SFSU credentials/email for your current CC account, please contact service@sfsu.edu. If, when you login the system does not recognize you, please send your name, ID number, and registration status (Major or Minor) to design@sfsu.edu.

For problems and support with accessing the Adobe software, students can call 415-405-5555, or email service@sfsu.edu. Please note that SFSU IT support is limited to troubleshooting access to the Adobe software or access to the Adobe Creative Cloud portal. SFSU IT cannot provide support or training for the use of the Adobe titles or support student computers themselves.

When students graduate or leave the University, they will lose access to the SFSU Adobe Creative Cloud license. To migrate their content that they may have stored in the Adobe Creative Cloud to a personal account, students will need to request assistance migrating their data. For now, this can be done by emailing service@sfsu.edu and a member of the AT Desktop Service will assist them.

Additional Applications:

Some advanced or special topic courses require additional software which may be made available to students in the course through an educational license, which may be purchased just before taking the class, or which is open-source and free. Information about accessing specific programs will be provided in these classes' syllabi.

Where to Purchase Additional Student Priced Software:

- <https://sfsu.onthehub.com>. *Always make sure that you are obtaining student pricing for the applications that you purchase and be ready to provide documentation supporting your student status. Your faculty can help you obtain all available discounts.*
- Companies will have student pricing on their sites. Please work with your faculty to ensure you are getting the best price if you begin using additional platforms.

In addition to the skill-development classes that teach them, core product design studio classes will require the use of these applications. Other courses may require additional special-purpose applications which are usually free/open-source and available for Mac and Windows.