

School of Design Laptop Requirement for New Majors Visual Communication Design (BSVCD) Fall 2023

The School of Design requires that each incoming Design student own a laptop with performance suitable for the work they will be expected to do, and that they be prepared to purchase certain software programs and accessories required by their courses.

You should budget for the purchase of the necessary hardware and software the same way you would books and other supplies for class. Educational purchase discounts for both hardware and software are offered by the [SFSU Campus Store](#) and by many online vendors. Most of the software you need will be provided to you for free as long as you are a student.

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

Hardware — Laptops 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: Please do not purchase a Microsoft Surface. This product does not have suitable graphics and processing capabilities and cannot run the software required for the BSCVD program.

Hardware — Specifications

- **Operating System (either one of the following):**
 - Apple OS: macOS 13 (Ventura), macOS 12 (Monterey), and macOS 11 (Big Sur) PC OS: Windows 11, Windows 10 versions 21H1, 21H2, and 20H2 (LTSB branches aren't supported.)
- **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 RAM for new computers in 2023; certain applications (e.g. Adobe After Effects) require this much. 32 GB will give superior performance, especially when running several applications at once. *It is worth getting more RAM up front to extend your laptop's useful lifetime, as software tends to become more RAM-hungry in newer versions.*
- **Storage:** 512 GB or larger solid-state drive (SSD). SSDs increase performance dramatically over older hard disk drive technology. Some laptops may have both an SSD and a hard disk for additional storage space, but do not purchase a laptop which only has a hard disk.
- **Graphics Capabilities:** A MacBook Pro with Retina Display and at least 4GB of VRAM will provide suitable performance. 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.
- **Mouse:** *A mouse with at least 2 buttons is required.* Laptop trackpads are not accurate enough for precision design work, nor are they ergonomic for use over long periods of time. You may also use a tablet (such as Wacom).
- **Backup and Storage:** You will be creating a lot of large files that can quickly fill up your laptop's storage drive — and you certainly don't want to lose all your work should something happen to your laptop. **To help prevent loss of data, all students are required have an online ("cloud") storage/backup that**

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syncs automatically. As an SFSU student you have a free Box account, accessible at <https://sfsu.app.box.com/>. This is a safe and secure way to store and back up your work. Other options include [Google Drive](#), [Microsoft OneDrive](#), or [iCloud](#); all sync automatically with your file system and have relatively low fees for the service.

Hardware — Useful Extras:

- **A second monitor** 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 generally stable enough to serve as backup drives, especially because they tend to bang around on your keychain, get forgotten in classrooms, go through the laundry, and so on.
- **External hard disk drive** for backing up your work (in addition to the cloud storage mentioned above). [La Cie](#) or [Seagate](#) are good brands. Read about the [“3-2-1 Backup Strategy”](#) for more information.
- **Spare AC adapter** so you can leave one at home and keep one in your backpack. This is the most frequently seen object in our lost and found.
- **Laptop sleeve** to keep your computer looking nice as it bounces around in your bag.
- **Extended warranty** for your laptop, such as AppleCare+, may be a good idea.
- **Insurance policy coverage** for your laptop may be 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. Never leave your laptop unattended! Thefts do sometimes occur, and it takes only a few seconds for someone to peek in a propped-open door and grab a laptop off a table.
- **External battery or power pack** (10000-20000 mAh) for charging laptops and smartphones.

Software — Basic Productivity Applications

To perform basic tasks like word processing, building simple slideshows, and working with spreadsheets, as an SFSU student you have free access to Microsoft Office: <https://its.sfsu.edu/service/office365students>. If you like, you may use alternatives like **Apple iWork** or cloud-based software like **Google Docs** instead.

Software — Design Applications

Nearly all of your design classes will require that you use **Adobe Photoshop, Illustrator, InDesign, and Acrobat Pro** in various ways. As a student in the School of Design (declared majors and minors only), you have free access to these programs, and all other Adobe applications, through the Adobe Creative Cloud. The process for accessing Adobe software for installation on personally-owned computers is at <https://athelp.sfsu.edu/hc/en-us/articles/360034974694-How-to-install-Adobe-applications-on-personal-machines>. Use your SFSU credentials to log in, and you should have immediate access to the Creative Cloud programs. The four programs listed above should be installed before you start your first classes in the School of Design.

If you have trouble accessing the software when logging in with your SFSU credentials, please send your name, ID number, and registration status (Major or Minor) to design@sfsu.edu. You can also call 415-405-5555, or email service@sfsu.edu. Please note that SFSU IT support is limited to troubleshooting access to the Adobe

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software or access to the Adobe Creative Cloud portal. SFSU IT cannot provide support or training for the use of the Adobe software or support student computers themselves.

After you graduate or leave the University, you will lose access to the SFSU Adobe Creative Cloud license. To migrate any content that you have stored on the Adobe Creative Cloud to a personal account, you will need to either download and transfer it manually, or contact service@sfsu.edu for assistance. SFSU IT has indicated that you will have at least a few months post-graduation to deal with this before the access ends.

Software — Visual Communication Design-Specific Applications

- **The Adobe Creative Cloud** suite including **Photoshop, Illustrator, InDesign, Acrobat Pro, XD, After Effects, Lightroom, Premiere**, etc (free to Design students, see above).
- **Unity** Development Platform (free license available).
- **Blender 3D** (free and open-source).
- Prototyping software such as **Figma** (free), **InVision Studio** and **Sketch**. Reduced-fee and free licenses are available for students – your instructors will help you with these when you start using the software.

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 demanding of the GPU, CPU, and RAM.

Some of the most widely used user prototyping, font authoring and surface-prototyping software only runs on Mac OS.

Software — 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 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

Make sure that you are obtaining student/educational pricing for any applications that you purchase! Many companies offer student discounts, sometimes as high as 90%. If you have questions, please work with your faculty to ensure you are getting the best price. Two good places to start are <https://sfsu.onthehub.com>, which has a variety of educational software packages for sale; and <http://www.novedge.com/>, which is a volume-license reseller that often beats even the companies' own student pricing.

Be ready to provide documentation supporting your student status — this may include your SFSU email address, a picture of your student ID card, or a screenshot of your class schedule.