

# BUYING A COMPUTER AND SOFTWARE

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*All students must have a functioning laptop to bring to class during Welcome Week.*

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## Quick guide

**Mac or PC?:** Mac preferred, PC OK

**Laptop or Desktop?:** Laptop

**New or existing?:**

- **Undergrads:** If your machine is more than 2 years old, consider a new one . It needs to last 3 years
- **Postgrads:** If you know and trust your existing machine, great. If you are new to design software, or if your machine is more than 3 years old, consider a new machine.

**Minimum hardware spec:** 16Gb Ram, 512Gb SSD storage, 7<sup>th</sup>-gen i5 processor or Apple Silicon

**When to buy:** Student discounts/offer start appearing at major retailers over summer, esp at Apple.com

**Protecting hardware:** Some kind of warranty is useful in order to avoid a long period without a laptop.

**Software:**

- **Adobe Creative Cloud:** Large discount available on arrival at Reading, so don't subscribe yet
- **MS Office:** Free to all UoR students, info on arrival
- **Other:** Some specialist tools may be required, tutors will advise later.

**Backing up data:** UoR account includes access to OneDrive for cloud backups. External HDD also useful

**Useful optional extras:** Monitor, mouse, multi-port USB-C adapter (for peripherals and wired networking)

# Detailed information

## Mac or PC?

To reflect the industry standard in the graphic design sector, **we recommend using Apple Macintosh laptops (Apple MacBook Pro)**. All software demonstrations will be Mac-based, as is our Departmental collection of software and fonts. It is perfectly possible to complete the course using a Windows-based laptop, but we don't recommend it unless you are a highly proficient and technically-minded user, as you will have to handle most of your own technical support.

## Laptops only, not desktops

For reasons of flexibility, we require laptops over desktop machines.

## When to buy

The speed of technological change means that any computer tends to feel a bit slow and outdated within three years. Two strategies to combat this issue are:

1. Buy your laptop at the last possible moment. This usually means buying it just before you arrive on campus. Note: It's worth checking for news of upcoming upgrades to Apple laptops, as new models are sometimes released in the Autumn. **Note that we run a computer setup session in welcome week, so we require everyone to have a functioning laptop by then in order that we can get you configured properly.**
  - a. This page on MacRumors gives info about likely release dates: <http://www.macrumors.com/roundup/macbook-pro/>
  - b. The current 'touchbar' MacBook Pros are the machines we recommend this year. We suggest you do not consider an older machine without a touchbar. This is not because of the inherent value of the touchbar, but rather than these machines happen to contain the latest, most powerful processors. **We suggest avoiding regular 'MacBook' or a 'Macbook Air', as these are comparatively underpowered.**
  - c. If funds allow, the mantra should always be to buy them most expensive machine you can afford.
  - d. Remember that, on a Mac, the amount of **RAM and Hard Disk space are NOT upgradable later**. If you are working to a budget, go for more RAM and Hard Disk space rather than higher processing power or clockspeed.
2. Arrive with your existing laptop, but be prepared to replace it at some point during the course, probably at the end of the first year.
  - a. Many students discover within a few weeks that their current laptops feel a little under powered, so do think hard about this option, as configuring a new machine part way through a term can be time consuming.

## Computer specification

### **Our current minimum recommended spec to last the whole course is:**

- **MacBook Pro with touchbar** (*not* a Macbook, a Macbook Air, an iMac Pro or an iPad Pro)
- **13" or 16"** Retina Display.
- **Apple Silicon** processor, or at least a **2.4GHz quad-core 7th-generation Intel Core i5** processor.
- **16GB of RAM minimum**. Because the RAM in new Mac laptops is NOT upgradable, we recommend specifying the maximum 16 Gb at the point of purchase.

- **Hard Disk Capacity: at least 512MB, ideally 1TB.** In recent years the default capacity of Macs has shrunk to compensate for more expensive, and much faster, solid state drives. But design work requires a lot of room, especially when working with high resolution images or video. You should therefore get the largest capacity you can afford. In most MacBooks, this is NOT upgradeable after purchase, so it is worth investing upfront.

### Protecting your computer

University life involves constant travel between your home, your halls, your Department and the Library. To cover the risks of damage to your laptop, we recommend the AppleCare Protection Plan paid warranty to cover you for the full three years of the course.

- University policy states that computer failure of any kind is not a reasonable excuse for failure to submit coursework. It pays to protect your investment in your education, as well as the hardware itself.
- Theft and accidental damage should be covered on your own personal insurance.

### Protecting your data

- The University provides every student with a free subscription to **Microsoft OneDrive** for backing up your work. The use of other cloud services to backup and share your work is also useful.
- Many projects at university are highly collaborative, so sharing files effectively is a must.
- University policy states that data loss is not a reasonable excuse for failure to submit coursework.
- Services like Dropbox, Onedrive and Google Drive are available free at the entry level. Apple's iCloud storage is currently less flexible, and not recommended.

### Software needed

- Adobe Creative Cloud is the industry standard suite of design tools.
  - Although you can subscribe independently, the **University has negotiated a big discount** on the standard student price. During Welcome week we will help you subscribe via the University to obtain this discount.
  - Includes Photoshop, InDesign, Illustrator, and dozens of other creative apps for images, web, sound and video editing.
  - Also includes access to a good library of fonts
- MS Office (especially MS Word and MS PowerPoint) are essential for written work. **The University provides a free copy of the complete suite to all students. You will be sent instruction on how to access this closer to your arrival.**
- Other software needs may arise during the course, depending on which options and projects you choose to take. But these tend to be smaller, cheaper apps that you can get from the Mac App store or apps for which we have negotiated a special (sometime free) licence.

### Software training

Your University account will give you access to LinkedIn Learning once you arrive. This online resource contains expert tutorials on all major software packages.

### Other hardware you might need

A computer is the only essential hardware, but we also recommend the following extras:

- An adapter for connecting to external screens, projectors, network cables and other peripherals is highly recommended. Macs come with ONLY USB-C ports, so you need an adapter to connect to many devices. Your exact need may vary, but at the top end is something like this: [https://www.amazon.co.uk/YXwin-USB-Hub-Delivery-Ethernet/dp/B07PSM6RQS/ref=sr\\_1\\_4?dchild=1&keywords=usb-c+ethernet+hdm&qid=1595252677&sr=8-4](https://www.amazon.co.uk/YXwin-USB-Hub-Delivery-Ethernet/dp/B07PSM6RQS/ref=sr_1_4?dchild=1&keywords=usb-c+ethernet+hdm&qid=1595252677&sr=8-4)
  - If you search for 'USB-C hub' you will find many options. Crucially, yours must include:
    - USB ports
    - An HDMI port
    - An Ethernet port
- To ensure you can participate in online teaching without wifi dropouts, it's useful to be able to connect to the internet with a wire, rather than relying on a wireless option. Most University halls offer wired internet in your study bedroom, and the adapter above will allow you to connect to it. However, if you're based at home or in private accommodation you may need to purchase a powerline adapter to let you pass your wired internet connection to a room of your choice.
  - Some options are shown here, but don't pay more than £50. Many £25 models are fine: [https://www.amazon.co.uk/s?k=powerline+adapter&ref=nb\\_sb\\_noss\\_1](https://www.amazon.co.uk/s?k=powerline+adapter&ref=nb_sb_noss_1)
- For online classes, a decent set of headphones (with a built-in microphone) is essential. The sets that come with phones are usually fine for this, but you may wish to check.
- An external hard drive to use for a full back-up of your machine. The latest Macs support Thunderbolt 3 (USB-C) connections, rather than traditional USB ports, so try to get a drive with that interface. Ideally, the size should be at least double the capacity of your computer
- A mouse remains useful, even though laptops have a trackpad. A quality brand with 5 buttons is beneficial. Some modern mice come with a USB-C cable, so you don't need an adapter for a Mac. **PC users will require a mouse for accurate working.**
- An external screen is recommended when working on large documents, as it allows extra space for tools and palettes, which take up a lot of space in Adobe apps. Aim for a minimum resolution of 1440p and a screen size of at least 20 inches.
- If you have an external screen, an external keyboard is also recommended.

## Before you arrive (undergraduates)

We do teach some aspects of computer use on the course, but self-directed learning on this front is essential. If you already have access to a Mac and to Adobe CC, you can practice using the different software packages (there are excellent online tutorials on the Adobe website). But it's OK to wait until you arrive, and we'll help you become familiar with these tools.

If you decide to buy your computer before you arrive, Apple often have offers during the summer for upcoming students which more or less equate to the educational discount for actual students.

## Before you arrive (postgraduates)

Most MA students are already proficient in a range of relevant software. We do embed some aspects of technical learning within the course, but self-directed learning on this front is essential. If you are not already an experienced user of Adobe InDesign you are encouraged to develop your skills in this program ahead of arriving at Reading.

Self-directed technical learning is supported through LinkedIn Learning – all University of Reading students have access to this resource during their studies.