**Department of Typography &
Graphic Communication**

University of Reading

MA COMMUNICATION DESIGN: BUYING A COMPUTER AND SOFTWARE

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All students must have a functioning laptop to bring to inductions held during Welcome Week.

Say it loud … You need 16Gb of RAM!

On Apple computers, you cannot upgrade this later. Only bring machines with at least 16Gb of Ram or you may find you stuggle. We also recommend at least 500Gb of internal storage.

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

When to buy

You will need to have a functioning laptop from Welcome Week for induction activities to the end of your studies. We don't not expect you to buy a new laptop if you already have one that is working well. However, the speed of technological change means that any computer tends to feel a bit slow and outdated in a few years, so if you are thinking of an upgrade, here's some guidance:

1. If you buy a new laptop just after you arrive on campus, you will be able to trigger an educational discount from the Apple Store.
2. 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.
3. It's worth checking for news of upcoming upgrades to Apple laptops, as new models are sometimes released in the Autumn.
   a. This page on MacRumors gives info about likely release dates:
      http://www.macrumors.com/roundup/macbook-pro/
   b. **We suggest avoiding regular 'MacBook' or a 'Macbook Air', as these are comparatively underpowered.**
   c. Each year usually sees small upgrades (mainly clock speed) and may prove useful. Stay in touch with rumours sites to see whether holding off on your purchase for a few weeks might buy you a little bit more power for the same money, but be warned

that Apple often wait until AFTER the start of term to make these upgrades, so that they can sell off current stock to students in the Autumn.

d. If funds allow, the mantra should always be to buy them most expensive machine you can afford, especially given that Apple's current range is almost impossible to upgrade component-by-component

e. Remember that the amount of RAM and Hard Disk space are probably NOT upgradable later. If you are working to a budget, go for more RAM and Hard Disk space rather than higher processing power or clock speed.

Computer specification

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

- **MacBook Pro** (*not* a Macbook, a Macbook Air, an iMac Pro or an iPad Pro)
- **14" or 16"** Retina Display
- Any **Apple Silicon** chip
- **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 500MB, 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 during your studies.

- 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. It's a subscription service, offering student discounts.
  - Includes Photoshop, InDesign, illustrator, and dozens of other creative apps for images, web, sound and video editing. o Also includes access to a good library of fonts through Adobe TypeKit o Sign up for the discounted rate here: https://creative.adobe.com/plans?plan=edu&promoid=KTROQ
- 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.

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+hdmi&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 (if you machine does not have one)
    - 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
- 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.