

# UCD Engineering

## Laptop Advice for Students (2021/22)

### Stage 1 students

#### Should I buy a new laptop?

**Not yet!!!**

If you have an existing laptop or can use an existing laptop for a minimum of 30 hours per week it will probably be fine for the modules in **Stage 1**. Start using what you have and upgrade later if necessary – that way you have a better laptop later in the programme, when you need it most.

For stage 1 students this year some modules may have components which are online. Some of these will be pre-recorded and can be watched in your own time. For others you will be expected to join a class, tutorial or practical online at a specific time therefore having a working laptop will make this easier for you. Most laptops will suffice for your first year.

In stage 1 the software you will use is available free online or through UCD and consists of:

- Excel/Word MS Office (Available through UCD Connect)
- Antivirus (Available through UCD Connect)
- Python/Matlab (Available through UCD Connect)
- Video Conferencing software e.g. zoom (Available online)
- Web Browser (Chrome/edge) (Available online)

It is recommended that your laptop has:

- Camera
- Microphone
- WiFi
- Speakers/headphone connectivity

#### Can I use a tablet?

No, not as your primary IT device. It will take longer to carry out assignments using a tablet.

## Stage 2 students and those that want to buy a laptop –

### What should I buy?

It is recommended to delay this purchase until the second year if possible as Laptop prices reduce with time and specifications may differ depending on the course you choose. This table is intended as a guide for the laptop requirements in Stage 2 and subsequent years.

	Minimum Requirements	Better specification (optional)
Operating System	Windows 10 ( <b>Home or Pro</b> ) 64-bit is <b>strongly</b> recommended.  <b>N.B.</b> Most engineering software used in stage 2 to stage 5 will <b>NOT</b> run on Apple Mac OS	
Screen size	Size is personal preference and a compromise between portability and ease of use (minimum 13.3")  Recommended resolution 1920 x1080.	
Processor (CPU)	Core-i5 8 <sup>th</sup> generation or newer or AMD equivalent	Core i7 8 <sup>th</sup> Generation or newer or AMD equivalent
RAM	8GB Ram	16GB is better if your budget allows
Graphics	Integrated CPU graphics processing will suffice	Dedicated GPU e.g. NVidia/AMD GPU if your budget allows.
Disk Storage	250 GB	>500 GB preferred, (SSD is better)
Networking	WiFi ac standard	WiFi ac or ax standard
Battery life	Most lecture theatres do not have power outlets, so a good battery life is useful.	
Optional Accessories	Protective Sleeve, Backpack, Mouse, Headset, Additional keyboard, Laptop lock, External hard drive, External monitor (for home use), Digital pen.	
Ports	USB +HDMI	
Warranty	1 year minimum	Extended warranty is recommended

**Decision Tree for helping decide if you need a new laptop in Stage 1.**

