The following items are necessary to carry out the design exercises that will be held during the first year of the BArch and MEng courses. However, items in bold should be considered as absolutely essential for the first term, with the remaining items needing to be added as required.

- **A4 sketchbook for Studio** - black hardback bound sketchbooks with good quality plain pages (not lined pages, not spiral bound) and a small pocket sketchbook with plain pages. Please ensure you always write your full name and contact details in all your sketchbooks.

- **5m retractable tape measure**

- **Good quality digital camera** for photographing projects and models. You can use the camera on your phone as long as it is of sufficient quality.

- **A2 Portfolio** with capability of holding A2 plastic portfolio sleeves in ring binders. Please clearly label with your full name.

- **A2 plastic portfolio sleeves** for A2 portfolio (at least 10 initially).

- **An A2 drawing board** is a vital piece of equipment. In year 1 you will complete all your architectural drawings by hand using a drawing board. In year 1 you will usually be in halls which are often limited in size, therefore we would recommend an A2 drawing board – preferably portable, desktop (not on a stand) with parallel motion and able to be adjusted to several angles. See Blundellharling (www.blundellharling.co.uk) for good examples of the type of board you will need – A2 Challenge / Ferndown or an A2 Trueline / Sherbourne portable drawing board (used flat or at 15, 30, 45 or 60 degrees) are ideal. The ability to position the drawing board at 60 degrees saves any pain caused from leaning over your drawing board. The A2 Trueline portable drawing board (used flat or at 15 degrees) is a cheaper alternative. Sometimes students in years 2 and 3 sell their old drawing boards so you may wish to postpone purchasing your drawing board until you find out if you can purchase a second hand one. You will not be using your drawing board or any technical drawing equipment until the 16th October.

- **Rotring Rapidograph or Isograph drawing pens: 0.18mm, 0.5 mm as essentials** (0.25mm is also useful). As a general principal the difference is that Rapidograph pens have ink cartridges, whereas Isograph pens are filled from an ink bottle. The Rotring pens are more expensive than alternative pens but their quality is far better. Please do not buy an alternative brand of pen as they are not a good enough quality for the course requirements. Your tutors can easily tell the difference and you will be asked to buy the correct pens. Rotring Pens can be bought in packs of 3 for a slightly better price than individually but you only need two pens – 0.18mm (or 0.25mm) and 0.5mm.
### Equipment list

- **A sketching tool kit** with propelling technical pencils / sketching pencils 0.5 mm (2H, HB leads) and 0.7 mm (2B, 4B leads), extra black fine liners (different thicknesses), a stick of charcoal or a thick soft pencil for sketching, an eraser, a sharpener (only if needed), drafting (masking tape) tape and any other sketching / drawing / painting equipment you may already have.

- **A model making tool kit** with cutting knife (ideally with snap blades or alternatively a scalpel blade), an A2 cutting mat, a safety metal ruler with cutting edge, scissors and pva glue.

- **Single sided or single edge razor blades** (for amending ink drawings).

- **Adjustable set square(s) OR Fixed 45 and 30/60 degree set squares** (with beveled or stepped edges for ink drawing).

- **Scale rule** - preferably flat or alternatively tri shape (make sure it includes the essential scales 1:20, 1:50, 1:100).

- **Circle template** and a normal small protractor.

- **A roll of any type of paper** (e.g. greaseproof) which is which is as wide as your shoulders and longer than you are tall.

- **A long strip of cartridge paper** – 550 x 260mm (kept flat or rolled – not folded).

- Two **A2 sheets of cartridge paper** and another four sheets of **A2 paper** for sketching.

- **A2 single sheets of good quality 90 gsm tracing paper.** The department does provide pads of A2 tracing paper but when you are learning to draw architectural drawings you can go through it at a fairly fast rate.

- **A blindfold** – something to tie round your head and cover your eyes.

- **A plain white short sleeved t-shirt** – this should be relatively cheap as you will be painting on it during the introductory project during week one.

- **Storage Tubes (A2)** are handy for carrying large paper/panels around. They can be bought cheaply on Amazon.
The first month of the course will be concentrating on sketching, drawing and model making. If you already have art equipment at home please bring this with you, as you will find it very useful.

Local Suppliers
The department has a materials and model making shop selling a lot of equipment needed for the course. The department also provides free card, tracing paper and other items which are needed for the course. However you will need to buy the equipment listed above either before or during the first few weeks of the course. In addition to the shop in the department there are a number of local suppliers in Nottingham.

Laptop Guidelines
It does not really matter whether you purchase a Mac or a Windows laptop. It will come down to personal preference and cost. The highest affordable CPU speed rating is recommended.

- **Processor**
  A higher-end Intel Core i5 model is a necessity. Anything above that should have a 5th-7th generation "i7" processor. Ideally the laptop should have a dedicated graphics card (Quadro or GeForce).

- **Memory**
  16 GB is desirable where you don’t have to worry about the memory (for the most part).

- **Storage**
  Most likely, something like 250/500 SSD + 1 TB HDD is enough.