



5 hours in Design & Technology.

Product Design.

Research shows that the most successful students (i.e. those that make the most progress and get the highest grades) are doing between 20 and 25 hours of independent study per week by the end of Year 13. That may seem a lot, but it's something that you would build up to over the course of your A-Levels. In Year 12, we're talking something more like 15 hours per week. This equates to roughly 5 hours of independent study per A-Level per subject.

Remember that your independent study is divided into three types – Consolidation, Reactive and Proactive. How this is divided may vary from week to week or between subjects but one approach could be:

Consolidation – Theory Lesson. The evening following a Product Design Theory lesson, you should spend 15 minutes rereading your notes, making relevant flashcards of the topic or processes studied e.g. Labelled diagrams of processes, mind maps.

Consolidation – Coursework Lesson. Following your coursework lesson, you will have a better idea of the direction of your project. It is crucial that you record notes from discussions you have with your teacher and map out the work you are going to complete before the next lesson. (10 mins)

Reactive - This will depend on where in the course you are. If in the early stages of the course this could be; -- Further research into your coursework – Materials research, Existing products, Client interview.

Designing – Initial design ideas created (with annotation) & recorded in your design folder.

Design Development – Further investigations, modification of design ideas. (Again, record ideas in your design folder, annotating any / all images.)

Manufacture Specification – Orthographic drawings of final design proposal, cutting list, flow chart for manufacture (enough information for a third party to make your product).

Evaluations – Final evaluation against specification. Final client interview / evaluation.

Evaluation should be present on every page throughout your folder. How the work on the folder will influence further direction / thinking / designs.

This may take 30 minutes to 2 hours per week depending on where you are with your coursework.

Refer to our Teams page for further resources.

Proactive - This is the section that will broaden and deepen your overall understanding of the subject you are studying. It will not necessarily involve work that has been set by your teacher, but instead it is about you attempting the extra practice questions, reading articles, watching videos, TED talks etc.

This might contain some of the following:

Complete a set of practice past paper questions – available on the AQA website (1 hour)

Use websites to complete and add to class notes (30 minutes)

Practice further exam questions from the worksheets (30 mins)

Watch a TED talk on a 3D printing or future product design topics (20 mins)

Carry out a quick product analysis of a product. (20 mins)

Watch some 'How it's Made' / 'Inside the factory' videos (10mins – 1 hour)

Useful links:

[AQA | Resources | Past Papers & AQA Mark Schemes](#)

[ENGINEERING - DESIGN AND TECHNOLOGY](#)

[TED: Ideas change everything](#)