



What will you learn?

Topic(s)

Autumn Term

Electronics: Designing and making a mini desk fan

Computer aided designing, design movements, systems approach, input devices, output devices, components, soldering technique, shaping polymer, vacuum forming, circuit diagrams, testing and evaluating final outcome.

Winter Term

Sustainable solutions: 6 R's of sustainability, anthropometric data, scale and proportion, designing ideas, joints and connecting methods, card modelling, working drawings, testing and evaluating final outcome.

Spring Term

Ergonomics: home organiser, works of design company, product analysis, aesthetic, functionality, ergonomic design, strip heater, line bending, smart materials, and computer aided designing.

How will you be assessed?

Overall assessment

During the practical tasks, students are assessed on their skills and completion of the core tasks. In addition to these Self and Peer assessments, verbal feedback from the teacher and regular home learning tasks are planned throughout the unit.

End of Year assessment

Students are assessed based on their final outcome product and on presentation of their work in books and online tasks.

Additionally students will be assessed on their attitude to learning using the practical subject ACS level descriptors ASSURED, SECURE, DEVELOPING and EMERGING.



Which resources should you use?

Books, websites, online resources, trips and visits

Visits to Design Museums can inspire you creatively.

The Design museum Kensington: <https://designmuseum.org/>

V&A Design Museum: <https://www.vam.ac.uk/>

Exhibitions eg. NEC Birmingham/Olympia & Earls Court London.

Try assembling any DIY furniture.

There are plenty of design programmes that you can gain inspiration from:

BBC Programmes:

<https://www.bbc.co.uk/programmes/m000jk7p>

Grand Designs:

<https://www.channel4.com/programmes/grand-designs>

How it's made:

<https://www.youtube.com/watch?v=jDrn5orS9oo>

How to make BBC iPlayer series:

<https://www.bbc.co.uk/iplayer/episode/m000gwzd/how-to-make-series-1-1-the-trainer>

Practice sketching:

https://www.youtube.com/watch?v=c_NRuzPs9R8

<https://www.youtube.com/watch?v=laPwhWBJ77o>

<https://www.youtube.com/watch?v=bjEw-mulcjA>

For revising topics:

<https://www.bbc.co.uk/bitesize/examspecs/zby2bdm>

(Design technology area)

What independent work can you do?

Books, websites, online resources

Use the VIP Zone, there you will find:

- An 'Independent Learning' folder full of resources and ideas to support your learning
- PLCs [Personal Learning Checks] - use these to rate your understanding of each topic and to recap and stretch your knowledge and skills.

Start revising. Try some of these to improve your understanding of each lesson and to help you prepare for assessments.

- **Summarise your notes:** Identify the key ideas and essential details. This technique improves understanding and retention by making information clearer and more manageable.



- **Flashcards:** Write key information on cards, don't forget to include an example
- **Mind maps:** Visually organize information by creating diagrams that connect ideas. This helps you see the relationships between topics.
- **Mnemonics:** Use songs, rhymes, or acronyms to help remember facts and figures.
- **Recording and replaying:** Record yourself reading notes and listen back to them.
- **Sticky notes:** Write / draw a key point on each note and place them around your house to help with memorisation.

Watch this: BBC Bitesize [The Best Memory Hacks to Help Your Revision](#)