

# Preparing for Sixth Form and Post-16 study

# Subject: Design & Technology

Key skills in **\*** Design & Technology for A-level/Post-16 study:

- Creativity and imagination, along with drawing and sketching ability.
- Technical ability and specialist knowledge of how things work or need to be designed and built. You may not have this yet but a desire to develop technical knowledge is essential.
- Problem solving and creative thinking to recognise problems and their causes, to identify a range of possible solutions and then assess and decide the best way forward.
- Communication and good listening skills, the ability to negotiate, or to be persuasive.
- Analytics, collecting and examining information in detail to arrive at a solution, to answer a key question or make an informed decision.
- Numeracy is essential in D&T as well as Engineering. Continue to develop your maths skills and knowledge everything we use must fit and meet specific tolerances.

Suggested background reading that will help you to understand the context of this subject post-16:

### Useful book/s to read:

- Don Norman. Emotional Design: Why we love (or hate) everyday things
- Victor Papanek. Design for the real world. PDF Copy https://monoskop.org/images/f/f8/Papanek Victor Design for the Real World.pdf
- Tony Booth. Part of the Royal College of Art Schools Technology Project S. series -Advanced manufacturing, design & technology: Post-16 - Student's Book - Hodder & Stoughton Ltd – ISBN 0340705280

### Websites to look at/webpage information to read:

- Design inspiration <u>http://thedesigninspiration.com/</u>
- Design inspiration <u>http://designspiration.net/</u>
- Technology Student Website <u>https://technologystudent.com/</u>
- The Design & Technology Association <u>https://www.data.org.uk/</u>
- STEM Science, Technology, Engineering and Maths website <u>https://www.stem.org.uk/fe-support</u>
- D&T Online with a wealth of information <u>http://wiki.dtonline.org/index.php/Main\_Page</u>

### Pod Casts

- Design Matters by Debbie Millman
  <u>https://www.designmattersmedia.com/designmatters</u>
- Material Matters with Grant Gibson
  <u>https://podcasts.apple.com/gb/podcast/material-matters-with-grant-gibson/id1450375359</u>
- Cautionary Tales by Tim Harford <u>http://timharford.com/articles/cautionarytales/</u>

#### Relevant films/YouTube videos to watch:

- Colorblind. Nike's Tinker Hatfield on designing Air Jordans, <u>https://www.youtube.com/watch?v=7iFkDrf3UKo&t=21s</u>
- Better by Design Shopping Trolley <u>https://www.youtube.com/watch?v=VhAtgJ3KRj8</u>
- Better by Design Razor <u>https://www.youtube.com/watch?v=xi13S2SBpcM</u>
- Ross Lovegrove. Organic design, inspired by nature
- <u>https://www.ted.com/talks/ross\_lovegrove\_organic\_design\_inspired\_by\_nature</u>
- Richard Seymor. How Beauty Feels
- <u>https://www.ted.com/talks/richard\_seymour\_how\_beauty\_feels</u>
- Don Norman. 3 ways good design makes you happy
- <a href="https://www.ted.com/talks/don\_norman\_3\_ways\_good\_design\_makes\_you\_happy">https://www.ted.com/talks/don\_norman\_3\_ways\_good\_design\_makes\_you\_happy</a>
- Yves Behar. Designing objects that tell stories
- <u>https://www.ted.com/talks/yves\_behar\_designing\_objects\_that\_tell\_stories</u>
- David Kelley. Human-centered design
- <u>https://www.ted.com/talks/david\_kelley\_human\_centered\_design</u>
- David Kelley. How to build your creative confidence
- <u>https://www.ted.com/talks/david\_kelley\_how\_to\_build\_your\_creative\_confidence?referr</u> <u>er=playlist-kickstart\_your\_creativity</u>
- Philippe Starck. Design and destiny
- <a href="https://www.ted.com/talks/philippe\_starck\_design\_and\_desting">https://www.ted.com/talks/philippe\_starck\_design\_and\_desting</a>
- Better by Design Bra <u>https://www.channel4.com/programmes/better-by-design/episode-guide/</u>
- Producttank (Channel) <u>https://www.youtube.com/channel/UCxyQKi7ipjA3Cz-VQUYanNQ</u>
- DesignDojo (Channel) <u>https://www.youtube.com/channel/UCxG9KEz4-ebUGCca0RUeK9Q</u>

#### Suggested activities:

Buy a sketch book and sketch and draw everything around you from houses, cars and architecture to people and good or bad design objects. Practicing your drawing skills will make communicating ideas much easier. Photograph products you love and think about why you love them.