GETTING AHEAD

HSDC SOUTH DOWNS

Start to develop skills that are relevant to your course before you join HSDC this September!

Engineering

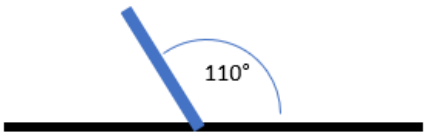
Welcome to the Engineering department at HSDC South Downs. Your teaching team are developing new resources and preparing the department for the start of your course in September 2020. One of the most important roles of an Engineer is to find solutions to problems, often in the most challenging of situations.

Activity

For your Getting Ahead activity, your teaching team would like to set you a practical challenge.

The challenge is to produce a working prototype model of a smart device stand. The problem to solve is that you can only use items found in the home/garage/shed.

The constraint to your design is that the smart device must recline (lean back) 110°.



The material choices could include paper, card, Lego, Meccano, wood, food packets, delivery boxes, metal from drinks cans, salt dough etc – your home is your resource.

Additional fixings will be required – be resourceful: consider tape, staples, sewing stitches, paperclips, glue, split pins, hairgrips, etc.

As with most Engineering solutions, it is often trial and error, so keep a record of the model development. This could be in the form of photographs, video, blog/vlog – you choose.

Bring your model and the record of its development to College when we meet later this year. The teaching team will choose the most inventive and creative design. There may even be a prize!

We look forward to seeing you in September!

For further information about your College and being a student at HSDC, please visit hsdc.ac.uk/South-Downs

Read

Read about James Dyson and how he developed new products
https://www.lb.dyson.com/en-LB/community/aboutdyson.aspx

Read about the Apollo 13 Space Mission problem
https://nssdc.gsfc.nasa.gov/planetary/lunar/ap13acc.html

Watch

A scene from the Universal Pictures movie Apollo 13 – “square peg in a round hole”
https://www.youtube.com/watch?v=ry55--J4_VQ

Did You Know?

Product development is a continuous process. Look at some of these 2019 inventions:
https://interestingengineering.com/15-inventions-that-will-make-your-2019-a-lot-more-interesting

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