

Product Design & Technology

PORTFOLIO ENTRY

Requirements & samples

APPLICATION STRUCTURE...

All applicants (School Leavers and Mature) to the BSc. Product Design + Technology at UL must submit a digital portfolio and written statement for assessment. These submissions must be used to demonstrate the applicants' **APTITUDE for**, and **INTEREST** in Product Design.

NOTE

Each submission is marked on a PASS/FAIL basis.

All work **MUST** be your own. Please include a signed Declaration of Originality confirming that all work is your own. This must be included at the start of their portfolio. Evidence of plagiarised work will result in disqualification from the selection process.

Applicants may be requested to attend an additional interview in order to discuss their portfolio further if deemed necessary.

See Product Design and Technology website for more deadline and submission details.

<https://www.ul.ie/courses/bachelor-science-product-design-and-technology>

WHAT WE ARE LOOKING FOR...

PORTFOLIO

A portfolio is a digital document that presents work / projects of interest.

All 2D or 3D work should be photographed or scanned and compiled using readily available software such as Microsoft PowerPoint to create the layout.

Each page must include a description of work.

Save as a PDF document.

Include a maximum 15 pages

The size and quality should be suitable for viewing on a computer screen.

WRITTEN STATEMENT

A written statement of why you wish to study Product Design & Technology should be included in the first page of your portfolio.

Max. 500 words

Don't worry about the quality of your writing, we will not be grading the grammar!

ATTRIBUTES...

SUCCESSFUL CANDIDATES will be able to demonstrate a variety of the following **ATTRIBUTES** through their portfolio submission:

Curious

Creative

Imaginative

Critical thinker

Maker/builder

Practical / hands-on

Interest in how things work

Problem solver

Empathetic (a desire to improve quality of life)

3d visual thinker (spatial awareness)

PORTFOLIO EXAMPLES

The following pages are multiple diverse examples of what you might put in your portfolio. These are simply to illustrate what types of projects / work is suitable, and hopefully to inspire you. You may include a maximum of 15 pages of your best work.

Projects from your Junior or Leaving Cert. subjects can be included, however these alone will not suffice. **You must include additional examples of creative work alongside these.** If you do not have any other projects to submit, have a go at the 'Mini Project'.

QUESTIONS THAT MIGHT HELP

This column includes a series of questions aimed to joggle your memory or past work, or inspire ideas for new work that could be included in your portfolio.

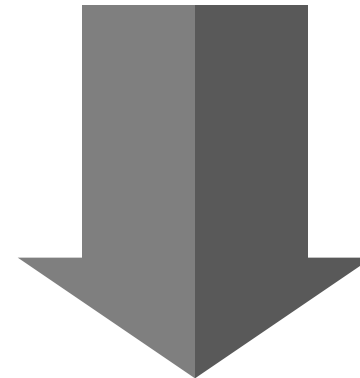
It also includes some **WORDS OF ADVICE** for when putting your portfolio together.



STUDENT EXAMPLES & DESCRIPTIONS

This column presents examples of student work that is suitable for portfolio submission. This is only a sample of the diversity of work appropriate for inclusion in your portfolio.

It also outlines the quality expected and layout format. Use a camera or phone to photograph your work. Use readily available software such as Microsoft PowerPoint to create the layout. **REMEMBER:** it is the content that we are interested in. The portfolio must be digital. Physical portfolios will not be accepted.



Have you ever...

DEVELOPED AN IDEA THROUGH SKETCHING?

EXAMPLE



BRASS CENTAUR

I wanted to create a piece based on my star sign – Sagittarius.

Using reference drawings from books, I created my own version. The sketches show my initial ideas. I cut it out of a plate of light brass using a coping saw. The final piece is shown on the bottom left.

Words of advice...

Include a description of what you did with each portfolio piece, and why you did it.

Have you ever...

MODIFIED SOMETHING?

EXAMPLE



CAMPERVAN CONVERSION

I helped my brother convert an old transit van into a campervan. This included installing windows, a small cooker, fridge and sink, and also bed that folded into a seat. Alongside helping him with most elements of the fit-out, I made a custom storage compartment for his surf gear.

WORDS OF ADVICE...

Don't worry if you couldn't do all the work yourself, it is natural to get help and learn from others.

Include as many images as possible.

Have you ever...

CREATED A PRESENT FOR SOMEONE?

EXAMPLE



CLAY MUGS

I made these for my sister's new born twins! As they are not glazed they cannot be used to drink from, and so are meant for storage as a keep-sake.

WORDS OF ADVICE...

Your work doesn't need to be perfect or finished, it can still be very interesting!

Have you ever...

BUILT SOMETHING FOR HOME?

EXAMPLE



CARDBOARD STOOL

I built this cardboard stool for my bedroom. It took lots of trial and error before it could support my weight, but in the end it worked! It also makes a handy table for putting things on.

WORDS OF ADVICE...

Photos do not need to be perfect, it is the content that is most important.

Have you ever...

CREATED OR ALTERED SOMETHING?

WORDS OF ADVICE...

Perhaps you participated in a 'Junk Kouture' project?

EXAMPLE



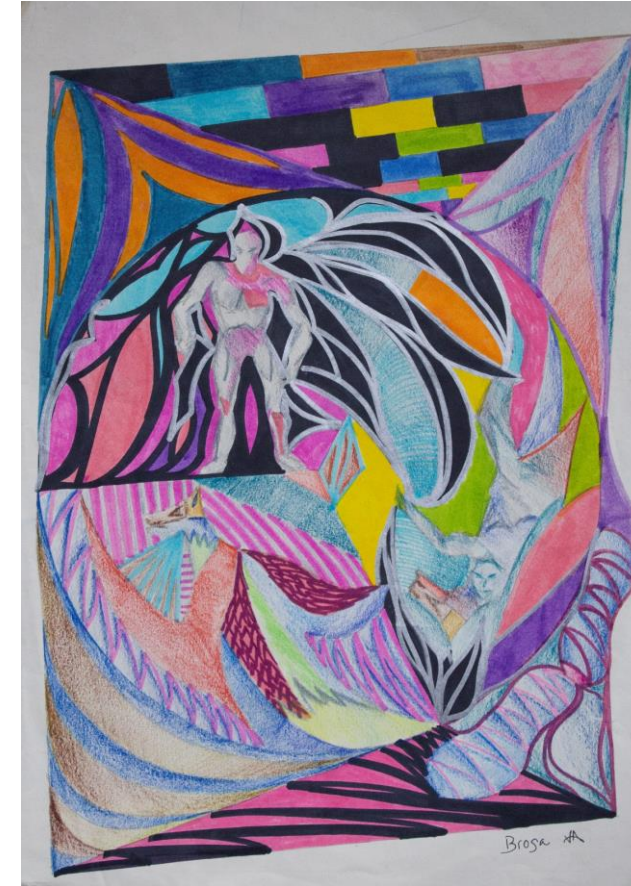
VEST TOP

I altered an old long sleeve black top my sister owned to make this vest top. I used my mums sewing machine to finish the seams. I also added some white script to make it less dull.

Have you ever...

EXPLORED PATTERNS OR COLOUR COMBINATIONS?

EXAMPLE



WEEKEND ART PROJECT

WORDS OF ADVICE...

Where possible reflect on your work and discuss what you liked or didn't like, what worked and what did not work. Feel free to include prints and illustrations.

I study art in school, but this is a project I did on my own at the weekend. I just started drawing and I like how the first image looked. I did another and then added colour, although I think I prefer the pencil piece. The colouring pencil colour is too weak in comparison to the marker colour.

Have you ever...

BUILT SOMETHING FOR THE GARDEN?

EXAMPLE



GARDEN SHED

My dad recently put up a shed in the garden. I drew the plans for him and he did most of the construction, although I did help him at times. I learned a lot about construction techniques, particularly the concept of strength through 'triangulation', by working on this.

WORDS OF ADVICE...

Also include what you learned from the project.



Have you ever...

DOODLED SOMETHING INTERESTING

EXAMPLE



SCRIBBLE PAGE

I was waiting for my lift home one day from school and I drew this. It was in the back of my copy book, hence the ruled page. I started with the hand and it developed from there.

WORDS OF ADVICE...

A drawing from the back of a copy book can be just as interesting as that done in a proper sketchpad.

Have you ever...

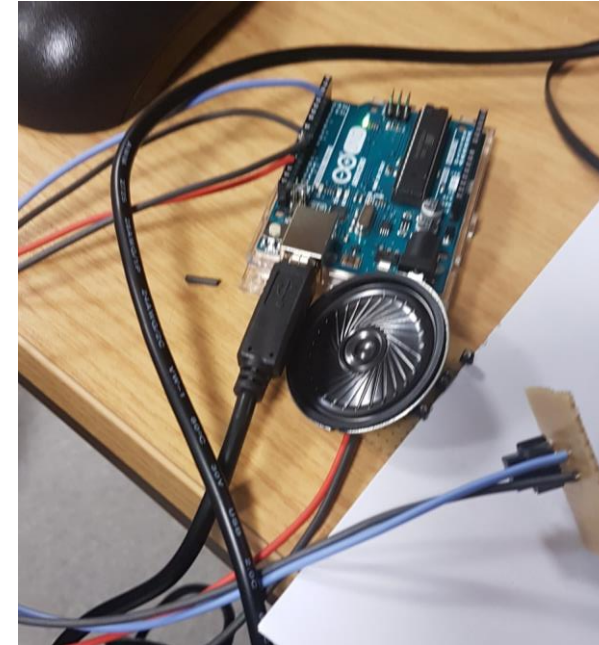
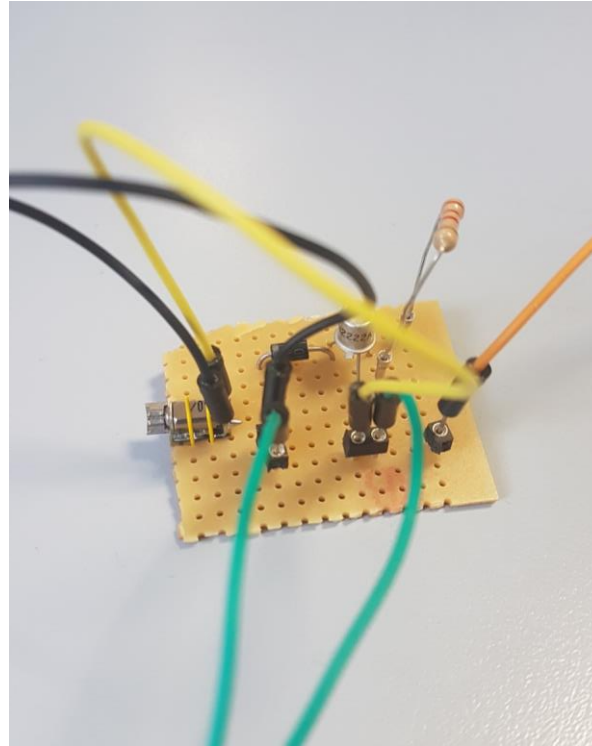
EXPERIMENTED WITH ARDUINO?

WORDS OF ADVICE...

Have you ever tinkered with technology / electronics, coding...?

Demonstrating an interest in, and exploring various subject areas is fantastic, even if the results are simple.

EXAMPLE



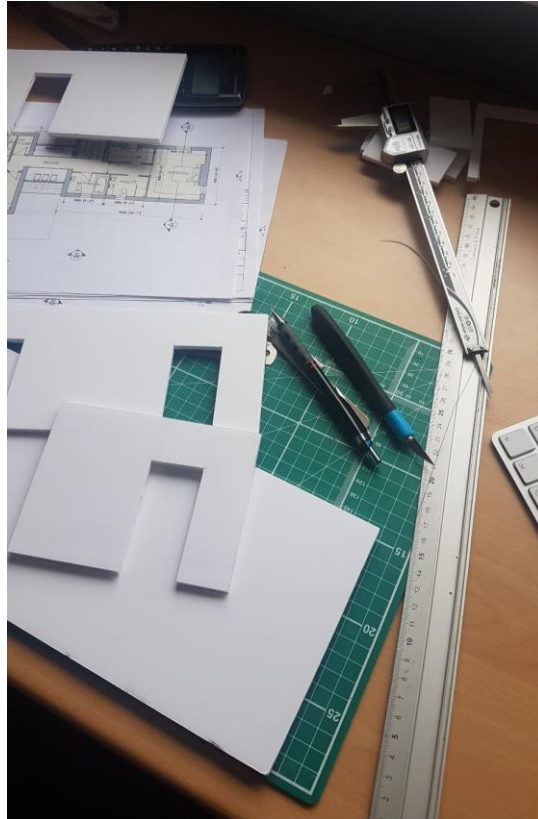
ARDUNIO AND BASIC PROGRAMMING

I received an Arduino as a Christmas present last year. It is great. Here is an example of one of the first things I experimented with. I connected a speaker that plays a pre-recorded message which is prompted by a proximity reader. It could be used to warn people of dangerous things. I connected it to my bedroom door to warn intruders about entering!

Have you ever...

BUILT A SCALE MODEL?

EXAMPLE



NEW HOUSE

My uncle built a new house last year and I decided to built a scale model based on the drawings. He is a civil engineer so was able to give me a hand. It is built from foam core sheets and took 3 weeks to build!

WORDS OF ADVICE...

If you remember, take photos of your process along the way. These photos can be as interesting as the final creation.

Have you ever...

CREATED A COSTUME?

EXAMPLE



HALLOWEEN COSTUME

Each year me and my friends build Halloween costumes. These are 2 examples from this and last year. The first one was easy, apart from finding a printer large enough to print the bits. The second one took a lot of work to build the dummy body underneath the shirt. I used a backpack and put lots of stuffing around it.

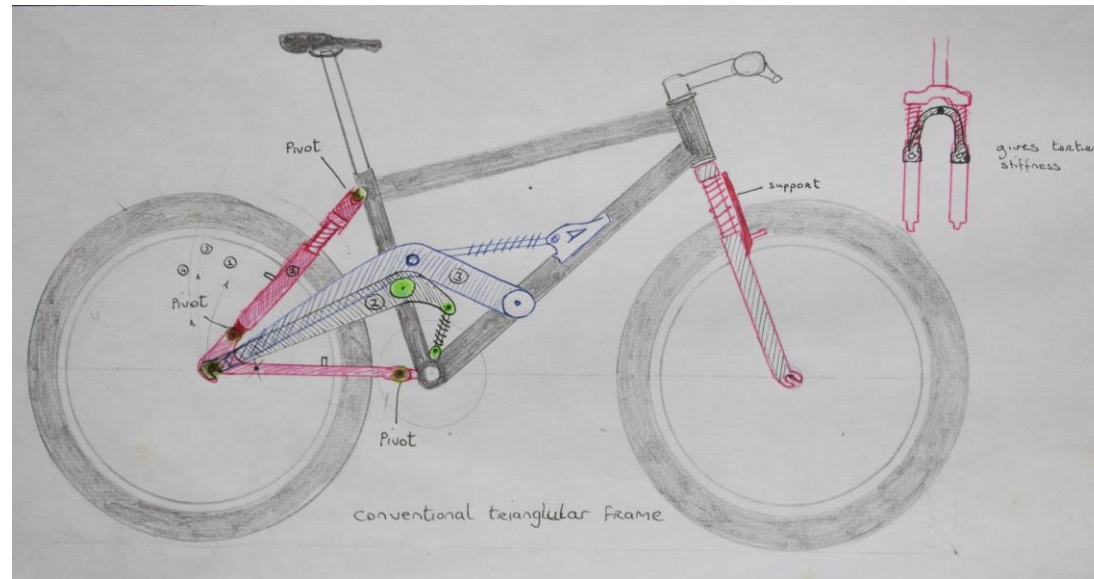


WORDS OF ADVICE...

Items made quickly when under time pressure can often be most interesting.

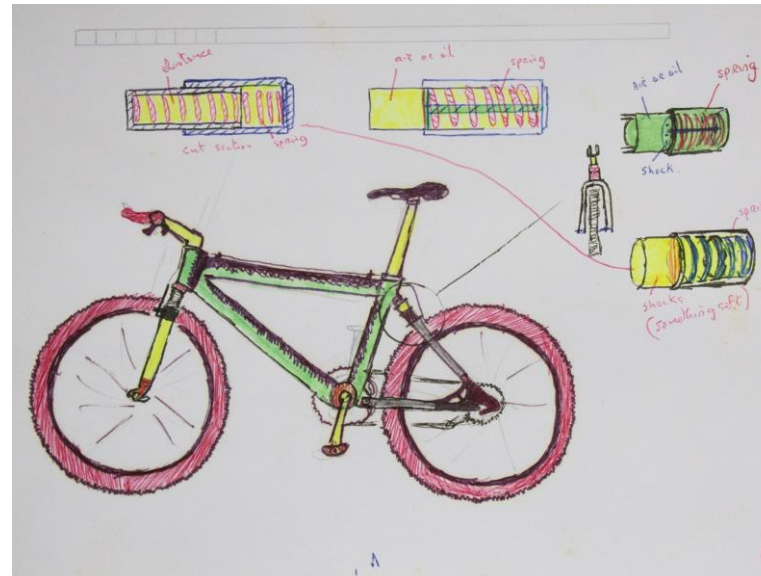
Do you have an interesting ...
HOBBY?

EXAMPLE



WORDS OF ADVICE...

Do you have a hobby that you are fascinated with? How much does the equipment or paraphernalia affect user performance? Do you ever think how this might be improved?



BICYCLE SUSPENSION

I am a huge fan of mountain biking and love the gear. I buy a mountain biking magazine every time I'm at the airport to see the latest gear. I also follow lots of bike websites. I was looking at how I might make my own full suspension bike in the two sketches attached.

Have you ever...

REPAIRED ANYTHING?

EXAMPLE



SMARTPHONE REPAIR

My mums phone was smashed recently, and I tried fixing it myself. I bought an i-fix-it kit and the replacement part online. It was much cheaper than a new phone! I then used online video instruction. It is still working!

WORDS OF ADVICE...

Have you fixed anything such as an old radio, mobile phone, walking stick, chair... If so, it might be something to include in your portfolio.

Have you ever...

DONE SOMETHING CREATIVE FOR FUN?

EXAMPLE



STENCIL PATTERN

After seeing work of the Graffiti artist 'Banksy', I became interested in stencil art. I saw this hand shape on a logo and wanted to recreate it so I redrew it and then cut out the stencil. I've used it to decorate my school bag and my wall at home.

WORDS OF ADVICE...

Being inspired by other artists or designers is a good thing.

Have you ever...

MADE SOMETHING FOR SCHOOL?

EXAMPLE



PENCIL CASE

I had some old material at home so I decided to put them together and make a pencil case. I used the colourful material inside the pencil case as I thought it would look really nice, and the denim outside as it is tougher. I used a sewing machine to stitch most parts.

WORDS OF ADVICE...

Include a description of what you did and why.

Have you ever...

REPAIRED SOMETHING?

EXAMPLE



SURFBOARD REPAIR

My surfboard fell off my sisters car and created a huge dent in the tail. It was unusable as it would take on water if not repaired. I bought some repair resin in the surf shop and filled and sanded the area. It is perfect again, apart from the colour difference.

WORDS OF ADVICE...

Repairing something successfully can be very satisfying, despite the result not looking like new.

Have you ever...

BUILT SOMETHING UNIQUE FROM LEGO

EXAMPLE



LEGO RUBBERBAND POWERED CAR

WORDS OF ADVICE...

Fantastic things can be built from Lego and Meccano. Have you followed the plans and built something successfully? More importantly, have you built something unique without the need for plans?

I had heard about using a rubber band to power cars and other things, so I built my own from Lego to test this. It takes a lot of twisting but is really powerful when fully loaded.

Have you ever...

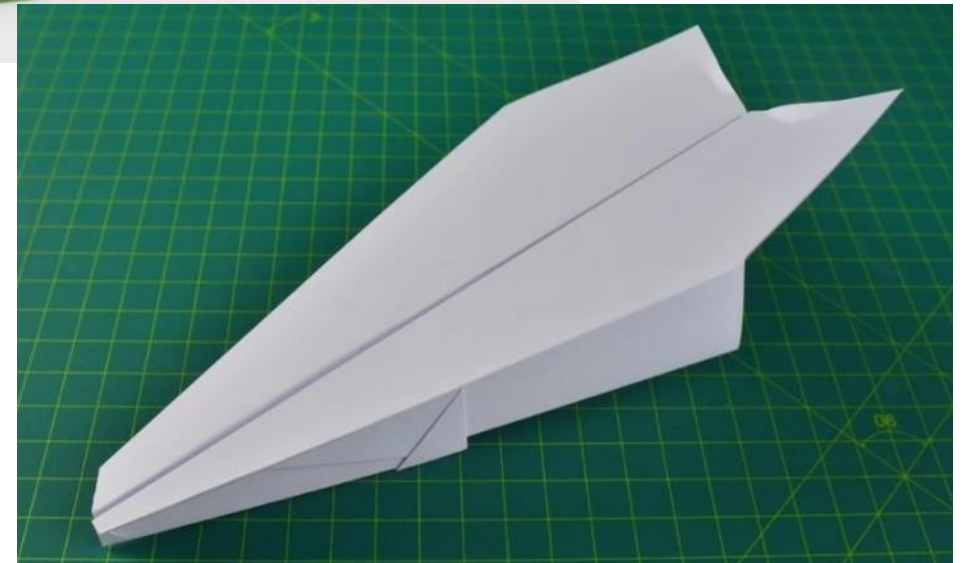
CRAFTED OBJECTS FROM PAPER?

EXAMPLE



ORIGAMI & PAPER PLANES

I have crafted lots of things from paper, the top picture is just one of many origami objects I have built. I use a strong coloured paper for best results. The picture on the right is of a paper airplane. My flight record distance is 20 metres.



WORDS OF ADVICE...

Simple materials can be used to craft beautiful, wonderful, and or functional objects. Even simple items are worth putting in your portfolio.

Have you ever...

CREATED SOMETHING FUNNY?

EXAMPLE



LEGO MAN PHONE HOLDER

I glued a flat piece of Lego onto my phone case. With this there are multiple things that can be done, such as stick a Lego man on to view the phone hands-free. You can also stick it in place in the car, which is really useful so it doesn't slide around everywhere.

WORDS OF ADVICE...

Sometimes it can be something very simple that makes a great solution.

Have you ever...

MADE SOMETHING TO HELP SOMEONE?

EXAMPLE



KEY HOLDER

My grandmother has lots of keys which keep getting lost in her home or handbag. I used to pieces of Meccano to keep them together. It also makes it much easier for her to grip and turn.

WORDS OF ADVICE...

Having empathy for others is an important trait for designers. After all, the aim of every designer should be to create solutions that improve peoples lives.

Have you ever...

MADE SOMETHING BETTER?

EXAMPLE



ANGLE GRINDER STAND

I made this for my uncle's angle grinder. It is a stand that makes accurate cutting of metal bars and pipes much easier. The guide can be angled for angle cuts. I cut and welded all the parts myself.

WORDS OF ADVICE...

Describe skills that you learned during the process. Once again, we are not looking for perfect designs or finishes.

Have you ever created...

SOMETHING BEAUTIFUL?

EXAMPLE



LASERCUT JEWELLERY

I drew the shape on my computer at home and had it cut in my local FABLAB. The shape is inspired by an African piece of jewellery I saw on holidays. I didn't intend for the wood to change colour during laser cutting, but I really like the way the laser charred the edges of the wood. The chain is one I found at home, but I hope to find something more suitable.

WORDS OF ADVICE...

Don't worry about showing mistakes, often these lead to wonderful pieces.

Have you ever...

PLANNED SOMETHING NEW?

WORDS OF ADVICE...

You should include sketchbooks or scribble books.

Not all drawings shown must be perfect – we will teach you sketching technique on the course.

EXAMPLE



WORK DESK

I was planning how I could use my small bedroom space more effectively. The aim was to combine everything I need into one desk. I didn't get a chance to make it as I don't have enough tools at home.

Are you...

INTERESTED IN HOW THINGS ARE MADE?

EXAMPLE



KAYAK

I studied how a kayak was made as I would love to make my own some day. I discovered that the process is called 'rotational moulding'. It is a very interesting process that uses heated plastic to flow around the inside of a steel mould. Lots of objects are made in this way; oil tanks, road barriers and street flower pots.

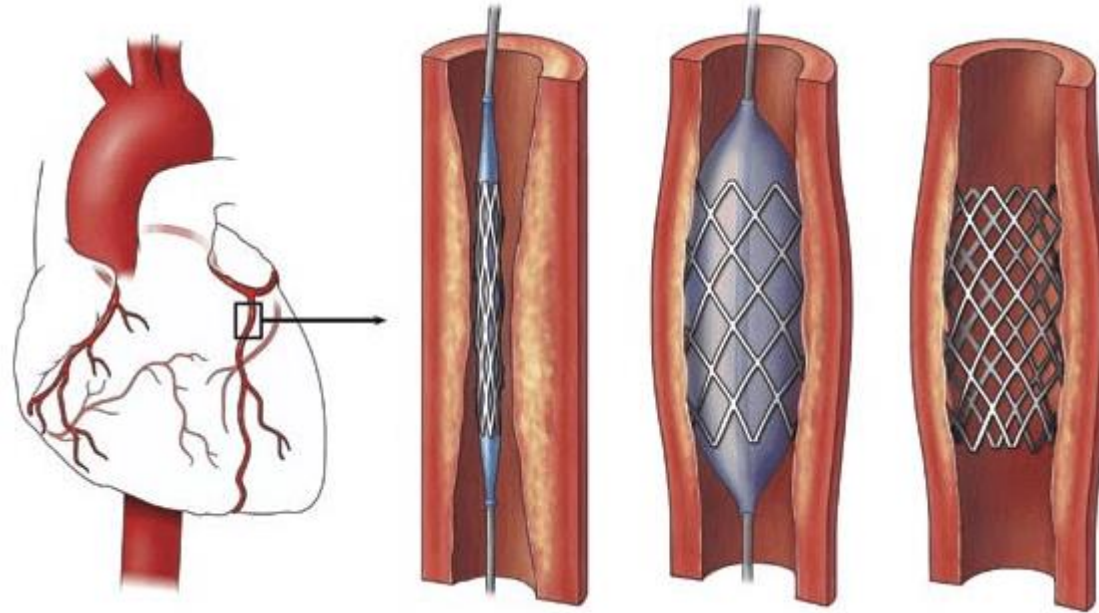
WORDS OF ADVICE...

A lot can be learned from researching how something is made.

Are you...

INTERESTED IN HOW THINGS WORK?

EXAMPLE



HEART STENT

My mum recently had a heart stent put in place as one of her blood vessels was blocked to cholesterol. The process is really interesting. A material called Nitinol is used to make the stent. The stent is compressed so it is really small, then introduced using a delivery device operated by the surgeon. Once in place the stent is released and it returns to its original size using an inflatable balloon. It will help keep the walls of the blood vessel open so normal blood flow returns.

WORDS OF ADVICE...

Being interested in how things work is important for any designer.

Have you ever...

CREATED SOMETHING TO MAKE LIFE EASIER?

EXAMPLE



MAGAZINE TIDY

As part of a school project I created this to help tidy my room. My mum helped me cut the pieces to size and then I covered them with material and glued them together. Up to 10 magazines or papers can be stored at any one time.

WORDS OF ADVICE...

School projects that demonstrate the attributes listed on page 2 should be included in your portfolio.

Have you ever...

MADE YOUR OWN OBJECT?

EXAMPLE



SUGRU KEY HOLDER

I made this key hanger for my brother so he could hang his keys in his bedroom. I put the smiley face on it as the colour reminded me of the smiley face logo, and it would make my brother happy every time he saw it.

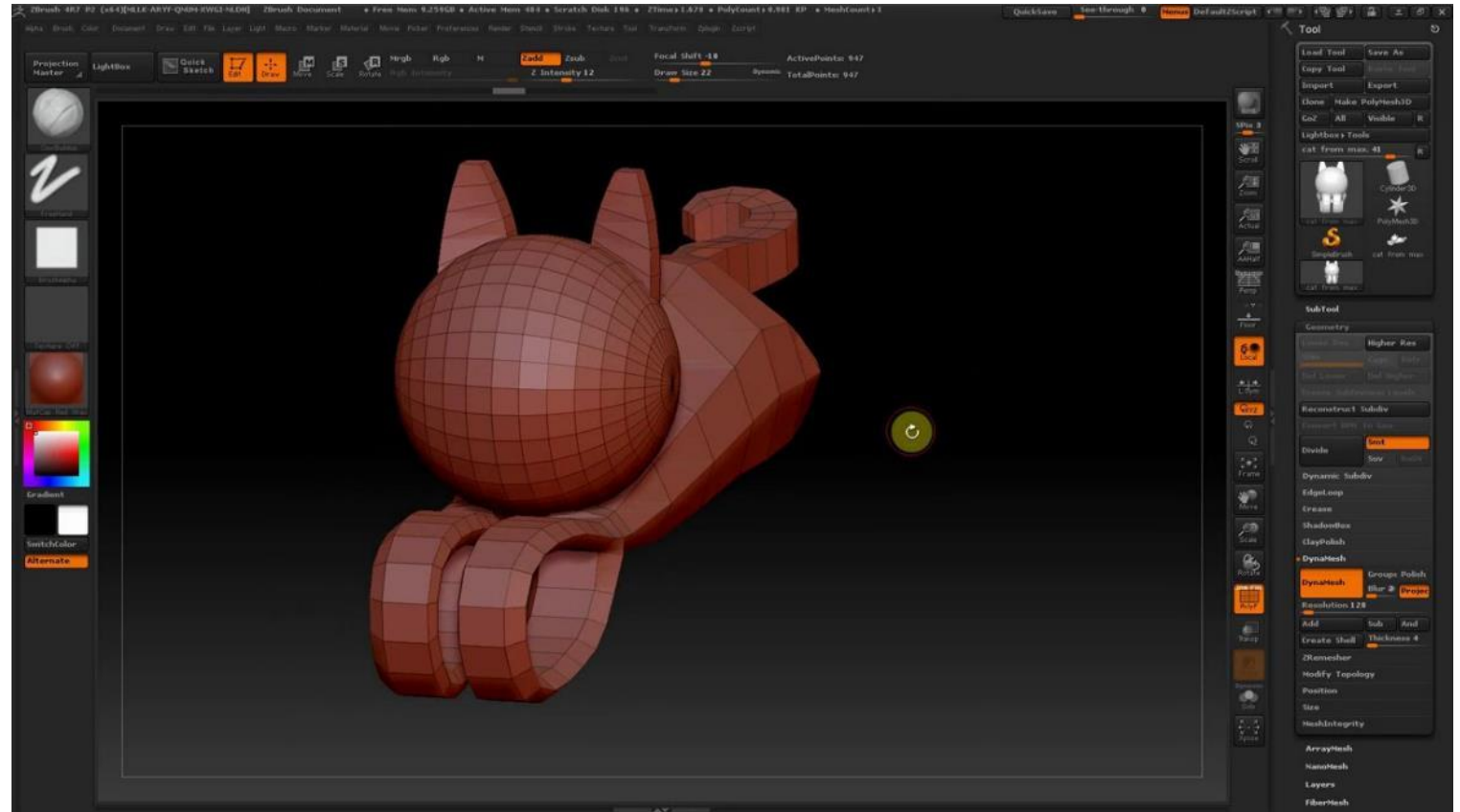
WORDS OF ADVICE...

Remember, this is NOT an art portfolio, aim to show us a diversity of creative work.

Have you ever...

CREATED SOMETHING NEW IN 3D?

EXAMPLE



ROBOT CAT

A friend gave me this 3D modelling software so I have been learning how to use it. This is a 'robot cat' based on my pet cat. The piece is unfinished, as there are some things I can't do with the software yet.

WORDS OF ADVICE...

You do NOT need to know Solidworks or any other 3D software. If you have done something interesting or unique however, include it in your portfolio.

Have you ever...

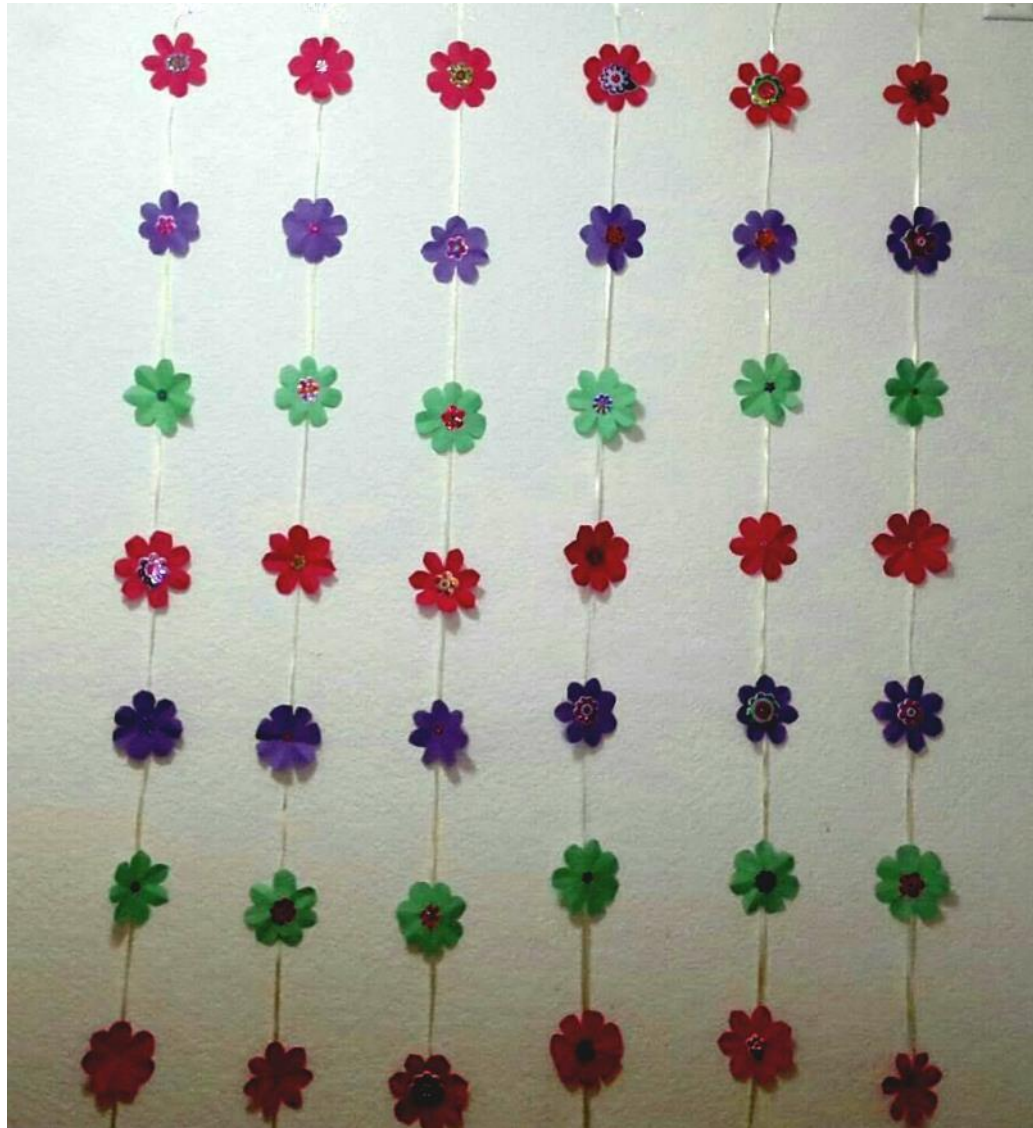
MADE ROOM DECORATIONS?

WORDS OF ADVICE...

Have you ever reused objects or materials to make something else?

You may show work in progress, we do not need to see the final finished piece.

EXAMPLE



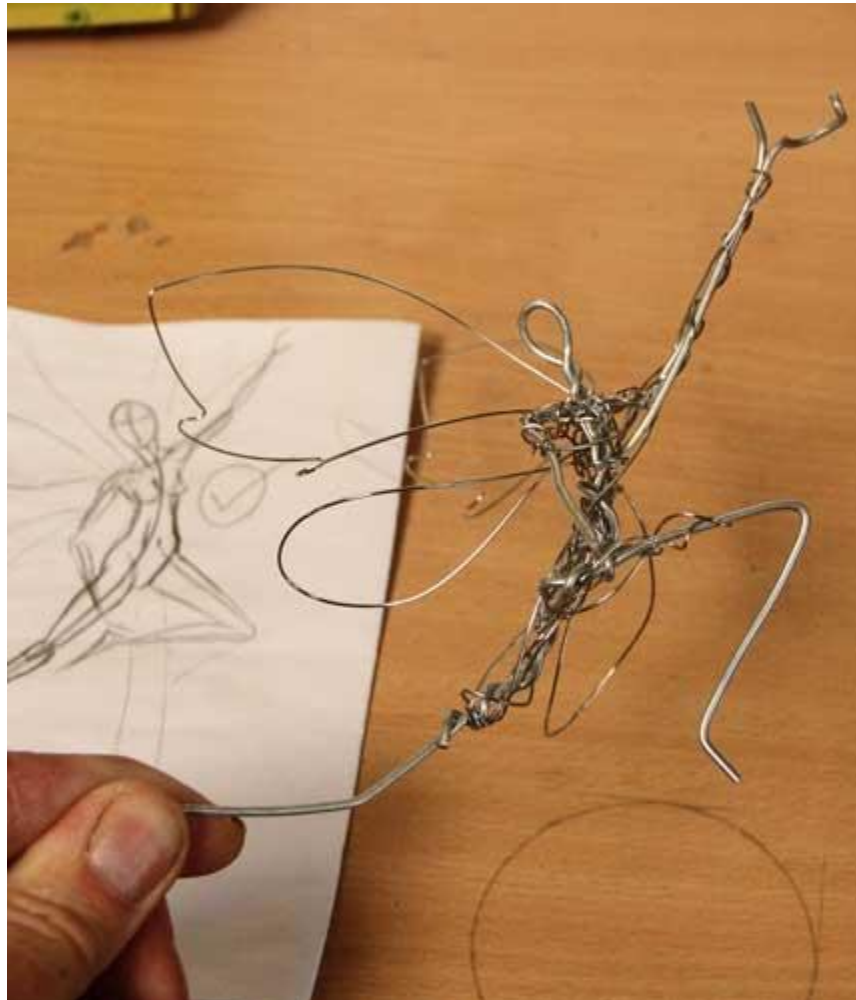
WALL DECORATION

This is a wall decoration I made last year. All the flowers are unique in shape and colour. I decided to keep them in lines of colour as I liked the uniformity of this. Each strand hangs from the picture rail. I would like to include an LED light in each one, but I don't know how to do this as yet.

Have you ever...

SCULPTED SOMETHING?

EXAMPLE



WALL DECORATION

This is a wall decoration I made last year. All the flowers are unique in shape and colour. I decided to keep them in lines of colour as I liked the uniformity of this. Each strand hangs from the picture rail. I would like to include an LED light in each one, but I don't know how to do this as yet.

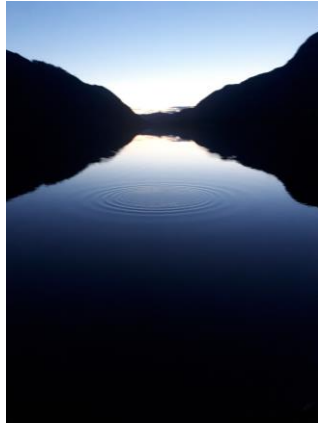
WORDS OF ADVICE...

Include a description of what you did and why.

Have you ever...

PHOTOGRAPHED ANYTHING OF INTEREST?

EXAMPLE



PHOTOGRAPHY

I love photography. I have been interested since I was 10. Here are some examples. From a lake in Norway & buildings in London.

I experimented with aperture settings as the sun set over the lake, and also threw some stones in to get ripples on the water.

The next photos were taken in London. One is of the Norman Foster's 'Gherkin' and the other of a cork material pattern I saw in a design shop. I liked the way both used triangular shapes to form interesting geometric patterns.

WORDS OF ADVICE...

If you have lots of work to show, feel free to use more than one page.

Have you ever...

MADE AN ANIMATION?

EXAMPLE



STOP GO ANIMATION

I created very basic characters made from pipe cleaner to experiment stop-go animation. I have a simple computer app that helps me compile these. The link to the final video is: (Insert video link here).

WORDS OF ADVICE...

This could be a stop go or digital animation using 3D CAD.

Have you ever...

IMPROVED PART OF YOUR HOME LAYOUT?

WORDS OF ADVICE...

Have you re-arranged your bedroom to provide more space? Have you altered your grandmother's kitchen to make it easier for her to work? If so show how you did this in your portfolio.

EXAMPLE



INTERIOR DESIGN

My parents recently renovated our house. I helped come up with ideas for how the interior might look. I like looking at interior magazines, so used some of these to inspire this layout.

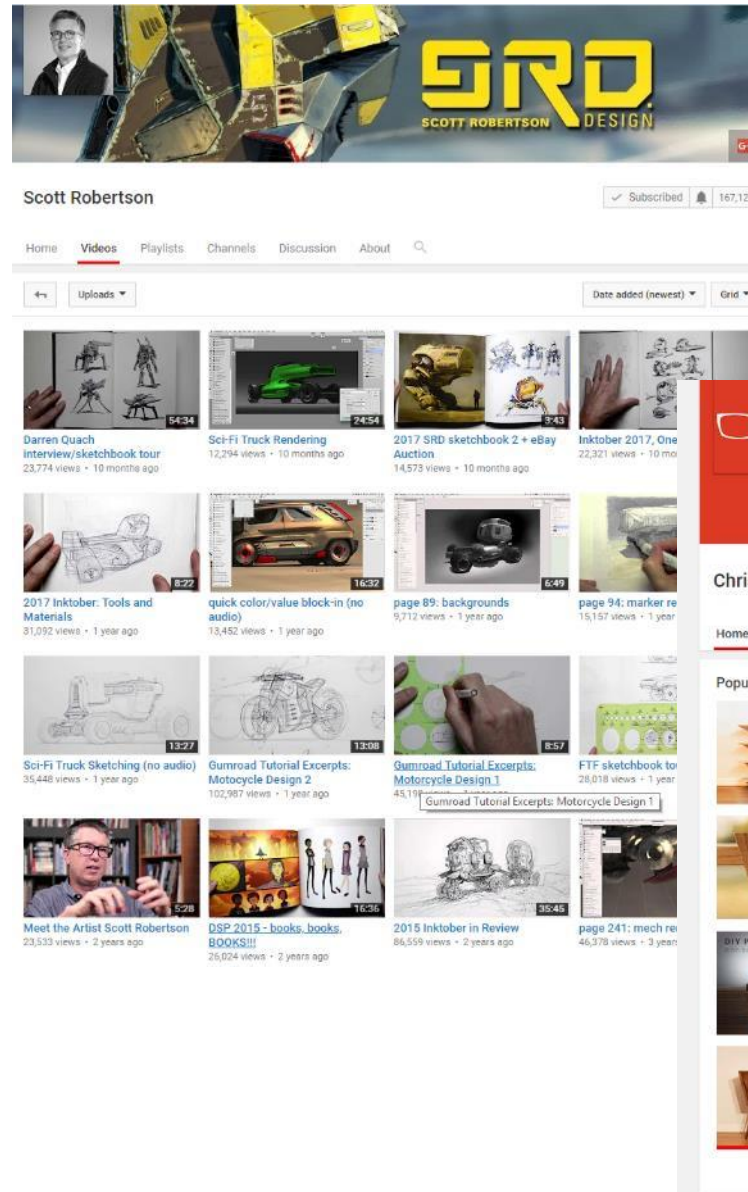
Do you follow interesting...

MAKERS / DESIGNERS / FUTURE TECHNOLOGIES?

WORDS OF ADVICE...

Do you follow YouTube makers / designers, do you read articles from online or in magazines about future technology or products? This can also be included in your portfolio. Describe your interests, what you have learned, or how you reproduced some of the work.

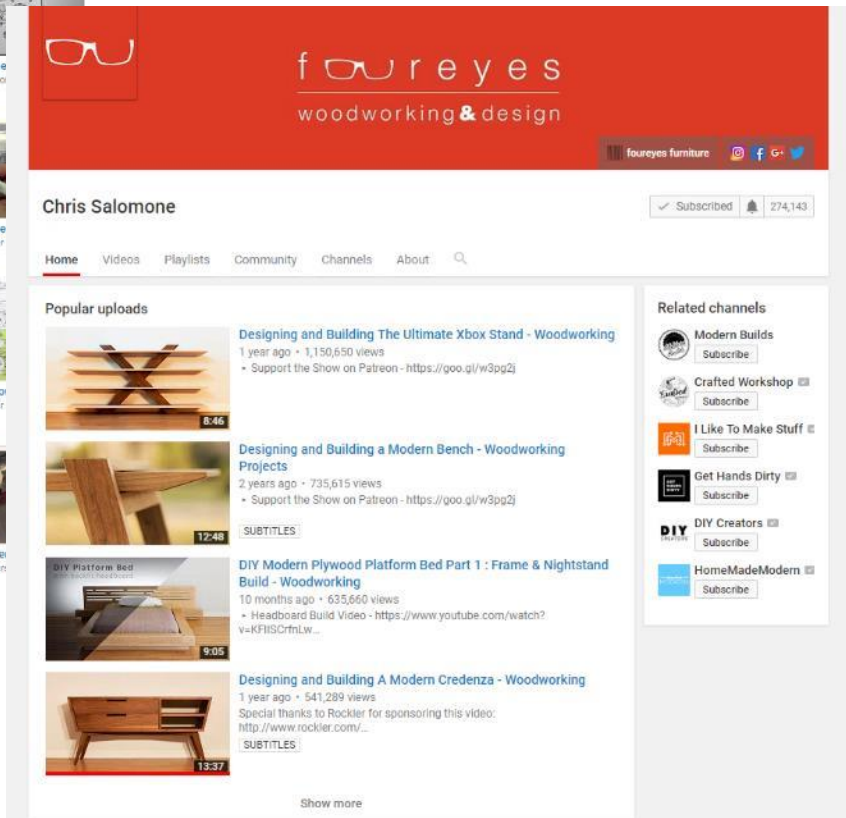
EXAMPLE



INTERIOR DESIGN

I follow a lot of artists and makers online, here are just two examples. I really like Scott Robertson's sketching techniques and I've learned a lot by watching his videos and recreating his work. You can see these in the sketchbook that I submitted.

I am also interested in furniture design. I have tried to make one or two things, but most are too complicated for me. The last page of my portfolio show these pieces made from pallet wood.



Have you ever...

CREATED SOMETHING IN A SCHOOL SUBJECT?

WORDS OF ADVICE...

Projects from your Junior or Leaving Cert. subjects can be included, however these alone will not suffice. **You must include additional examples of creative work alongside these.** If you do not have any other projects to submit, have a go at the 'Mini Project'.

*Only include the creative /unique elements of your school projects and not the entire project.

EXAMPLE

DCG

Construction Studies

Technology

Engineering

Home Economics

Art

Agricultural Science

...

DESCRIPTION OF WORK

Whatever you include ensure you describe what was done and why.

If you don't have enough work perhaps try the...

MINI PROJECT

EXAMPLE

CHECK OUT THIS YEAR'S MINI PROJECT DESIGN CHALLENGE ON THE PRODUCT DESIGN WEBSITE:

<https://www.ul.ie/courses/bachelor-science-product-design-and-technology>

WORDS OF ADVICE...

Spend one week tackling this year's mini project. Submit all work, including the 'mistakes'. Don't worry about the quality of work, or having a perfectly finished design. Include a description of what you did and why. Have fun trying it!

SUBMISSION DETAILS

See Product Design and Technology website for more deadline and submission details.

<https://www.ul.ie/courses/bachelor-science-product-design-and-technology>

CONTACT DETAILS

Email: schoolofdesign@ul.ie

Tel: 061 202638

Website: <https://www.ul.ie/courses/bachelor-science-product-design-and-technology>