

Challenge Journal

Sustainable design seeks to provide solutions to problems that are better for people and our planet. It touches on every design sphere, from beauty to architecture, and it enables the continued survival of our species and our planet as it reduces the number of resources, pollution, and energy use for our everyday lives.

Working on your own, or in a group of up to four, Bournemouth University (BU) challenges you to design a sustainable product that solves a real-world sustainability problem. Below are some of the principles that should guide your design.

Reduce waste and pollution: no more excess packaging, wasted energy or water in production, or consumption of non-renewable resources.

Keeping it in the loop: keeping products in use through reusing, redesigning, repurposing, or fixing.

Supporting biodiversity: using design to eliminate negative environmental impact.

You will find some additional information and links to useful resources at the back of this journal. As a guide, we suggest you spend 8-10 hours in total on the challenge. The deadline to submit your journal is midday, **Friday 9 June 2023**. If you are working as a team, you will need to submit individual journals.

The information you provide in your journal will be used to judge your design based on the questions and tasks in each section. Your details will only be used to contact you if you are shortlisted.

Your name	Click or tap here to enter text.
Team members (if applicable)	Click or tap here to enter text.
Team name (if applicable)	Click or tap here to enter text.
School	Click or tap here to enter text.
Year group	Click or tap here to enter text.
Teacher's name	Click or tap here to enter text.

Introduction

We are looking for a fresh and exciting idea that provides an innovative solution to a sustainability problem of your choice. Your inspiration may come from personal experience and observations of the world around you. This could include the news, other media coverage, or through research specifically for this challenge.

This section should take you 3-4 hours to complete.

Mood board

Create a mood board below to share your inspiration and ideas, this section should be no more than one side of A4.

What is the problem you are going to solve? *(250 words max)*

Why did you choose it? *(250 words max)*

What is your solution? (300 words max)

Click or tap here to enter text.

Who will benefit from it? (250 words max)

Click or tap here to enter text.

Product design

Now that you have chosen the problem you want to solve, we want to hear more about the product itself and see some drawings of your design. You will need to scan or take a photo of your drawings and email them to us at the same time you submit your completed challenge journal.

This section should take you 2-4 hours to complete.

Function: how will it work to solve your problem? (150 words max)

Click or tap here to enter text.

Aesthetics: what will it look like? (150 words max)

Click or tap here to enter text.

Economics: how much will it cost to make? (150 words max)

Click or tap here to enter text.

Disposal: how will your product be disposed of? (100 words max)

If a product is entirely sustainable, the disposal phase will begin the life of a new product

Click or tap here to enter text.

Drawings:

Please provide detailed and accurate drawings of your idea, which should be to scale and from different perspectives, including 2D and 3D compositions. You can choose to draw this on A4 or A3 paper or by using Computer-Aided Design (CAD) software to submit alongside your journal

Reflections

This section should be an honest reflection of your work on the challenge, from the creative process through to the production of your design and drawings. If you completed this challenge in a team, please fill in the additional question related to working in a group.

This section should take you 1-2 hours to complete.

What challenges did you face and how did you overcome them? (150 words max)

Click or tap here to enter text.

If you were to do the challenge again, what would you differently? (150 words max)

Click or tap here to enter text.

What support did you access throughout the challenge (this could be people or other resources such as the internet)? (150 words max)

Click or tap here to enter text.

Is there anything you would change in your approach to sustainability following this challenge? (150 words max)

Click or tap here to enter text.

If you worked in a group, how did you split roles and responsibilities? (150 words max)

Click or tap here to enter text.

If you have any additional comments please add them below:

Click or tap here to enter text.

Challenge feedback

This section is about how you have found taking part and completing this journal. This section is optional and will not be reviewed by the judges, but we are collecting this information to see how the challenge could be improved in the future.

How easy or difficult have you found completing the journal?

Very difficult

Fairly difficult

Fairly easy

Very easy

Why did you give the answer above?

Click or tap here to enter text.

What part of the challenge did you enjoy the most? Why?

Click or tap here to enter text.

How do you think the challenge could be improved in the future?

Click or tap here to enter text.

Useful information and websites

You will find some useful information below to help you with the challenge, from exploring your initial ideas to completing the journal.

Remember it should take approximately 8-10 hours in total to complete, so planning your time is very important. If you get stuck, you can use the information below to help as well as speaking to your teachers, family, and friends.

Starting your challenge journal

- Hear from our team as we talk you through the challenge and share examples of how to complete each section
- Make sure you read through the challenge guidelines and the instructions under each section of the journal
- Have a look at the [BU Festival of Design & Engineering](#) for inspiration.

Research

- The Ellen MacArthur Foundation are world leaders in [sustainable/circular design](#). They have a helpful toolkit and video explaining the [circular economy](#) and how it links to sustainable design
- Check out this useful video on [what sustainable development is](#) to help you identify problems and solutions
- Visit our [sustainability pages](#) to find out what we are doing at BU to be more sustainable.

Creating your mood board

- There are many ways to create mood boards, depending on personal preference and the product you are designing. Toptal's [guide to mood boards](#) is a great place to find out more
- Mood boards can be digital (on a screen) or physical (on paper) and can include sketches, photographs, and other images to show the development of your product and ideas.

Annotating your drawings

- Annotating your designs is important as it lets us know what you have done and why
- To find out more about creating and annotating your drawings visit [BBC Bitesize](#)
- Your designs can be completed on plain, [isometric grid](#) or [isometric dot](#) paper, or a combination of these
- You can sign up for a free [Sketchup](#) account to create computer aided designs (CAD) if you are confident using this software - you will not be marked differently if you use a CAD program.

Submitting your journal

You will need to email your completed journal and all supporting documents to schoolsliaison@bournemouth.ac.uk by midday, **Friday 9 June 2023**. Please make sure that you have added your name and your school to all submitted work.

We will email you to confirm that we have received your submission.

Checklist:

- Challenge journal
- Mood board
- Sketches
- Final designs