



Why study?

Art & Design



How studying GCSE Art and Design could lead to a job at Sizewell C

What does Art and Design have to do with the nuclear industry?

Art and science may seem an unlikely combination, but since the dawn of the nuclear age, writers and artists have been drawn to explore this seemingly magical energy. From science fiction fables, through to sculpture by greats like Henry Moore¹, to modern-day artists like Angel Rafael Vázquez-Concepción², artists have long been moved by the science and impacts of nuclear technology.

But art isn't just about producing artworks. Artistic skills such as sketching or computer design are hugely valuable in an industry where building quality and craftsmanship are vital to meet exacting specifications. And while an art qualification might not be essential, art skills will help you pursue many nuclear careers.

Careers at Sizewell C

Sizewell C will have plenty of design and engineering roles where an art and design GCSE would be an asset. It could be particularly useful if you're also good at maths. For instance, art skills could help you with the design and innovation you need to excel as a [digital engineer](#)³ or [civil engineer](#). Or an art and design GCSE could start you down the road to creative jobs in architecture⁴ or graphic design. For example, [computer-aided \(CAD\) designers](#) use their artistic abilities to help model design ideas in software.

As a [metal fabricator](#)⁵, you'd apply your artistic skills to craft metal forms, parts and structures using different techniques and equipment. And towards the end of Sizewell C's construction phase, there'll be a need for [landscapers](#), [painters](#) and [coating applicators](#), who can turn their skills to creating and maintaining a pleasant environment for the finished plant.





Career pathways using Art and Design

- ✎ Apprenticeships are a common route into roles like landscaping and metal fabrication. Find out more on the government's [Apprenticeships website](#) or have a look for [Sizewell C apprenticeships](#).
- ✎ A degree provides an alternative route into other positions, such as a CAD designer⁶. You can also work towards Chartered status in roles such as a civil engineer.
- ✎ In some cases, an internship or industrial placement can help you experience a role or industry and make some early contacts. Your college or university should be able to help you find opportunities.
- ✎ EDF is working with local schools and colleges, such as [East Coast College \(Lowestoft\)](#), [Suffolk New College](#) and [West Suffolk College](#), so have a look at their websites for pathway courses too.

Art and Design skills



Studying art gives you the perfect opportunity to explore your **creativity**, working in disciplines like paint or sculpture to produce original work. Once you start your career, you're likely to draw on other skills like **teamwork**, as you work with other designers or trades to implement ideas or designs. In design positions, you'll be **aiming high** to reach the very demanding standards of the nuclear industry. And as your career progresses, you could have a chance to develop and use **leadership** to get the best from your team.

Useful links

icanbea... Career ideas and opportunities in Norfolk and Suffolk

Young SZC: Connecting young people to careers and apprenticeships in the region

BBC Bitesize: What GCSEs should I take?

BBC: Jobs that use art and design

1. <https://www.apollo-magazine.com/nuclear-powered-the-art-of-the-atomic-age/>
2. <https://medium.com/generation-atomic/abstract-art-brings-atomic-healing-to-nuclear-power-debate-cb6adce5a52>
3. <https://www.instituteforapprenticeships.org/apprenticeship-standards/digital-engineering-technician-v1-0>
4. <https://www.careerpilot.org.uk/job-sectors/subject/art>
5. <https://www.instituteforapprenticeships.org/apprenticeship-standards/metal-fabricator-v1-0>
6. <https://nationalcareers.service.gov.uk/job-profiles/cad-technician>
7. <https://www.apollo-magazine.com/nuclear-powered-the-art-of-the-atomic-age/>
8. <https://www.foronuclear.org/en/nuclear-power/questions-and-answers/on-applications-or-nuclear-technology/how-can-we-apply-nuclear-technology-to-art-restoration/>
9. <https://www.forbes.com/sites/evaamsen/2020/02/25/the-art-hidden-in-the-worlds-largest-nuclear-fusion-reactor/>
10. <https://www.epa.gov/radtown/radioactivity-antiques>

All information correct at the time of going to print in December 2023.
Some of the images come from our sister project, Hinkley Point C, in Somerset.

Art and Design in action

Intrigued by the crossover between art and atoms?

Discover more in our quiz!

1. Which famed artist was commissioned to create a sculpture commemorating the first controlled nuclear reaction?

- a) Antony Gormley
- b) Rodin
- c) Henry Moore

2. Nuclear materials are sometimes used to help restore and conserve artworks. Which of these is NOT a real example⁸?

- a) X-ray fluorescence: can uncover forgeries, techniques and hidden paintings without destroying a work
- b) Ionising radiation: used to kill insects or mould in damaged art
- c) Nuclear chromatography: restores the colour of faded paints and pigments

3. Sculptor Christine Corday has contributed an artwork to the International Thermonuclear Experimental Reactor⁹: a giant project to see if nuclear fusion can be used to generate power. Does Corday's work look like:

- a) A single bolt
- b) A glass flask of radioactive material
- c) A huge mural, mounted on the reactor's outer wall?

Did you know?

Some artists and creators have worked directly with **radioactive materials**. In the early 20th Century, clock and watch dials glowed in the dark thanks to radioactive radium or tritium paint. Some ceramics made until the 70s had radioactive glazes, while canary glass gets its yellow colour from **uranium**¹⁰.

Answers:
Q1. c) Q2. c) Q3. a)