

## Transcript

### The science of nuclear energy

[MUSIC PLAYING]

**Sam Smidt:**

Nuclear energy, what is it? Why is it interesting? And why are so many people worried about it?

**Gemma Warrnier:**

Over the four weeks, we'll explore four different themes, from looking into the atom to understand nuclear fission and radioactivity.

**Sam Smidt:**

To generating electricity, and understand why is nuclear energy back on the political and economic agenda.

**Gemma Warrnier:**

We'll look at the risks of nuclear energy, both real and perceived. We'll also examine the facts around the nuclear accidents that you might have seen on the news. And finally, we'll look at the issue of nuclear waste.

**Sam Smidt:**

You'll do all of this from a scientific viewpoint, but you'll also consider the social viewpoints too.

**Gemma Warrnier:**

Finally, we'll look to the future in nuclear fusion. We're filming at the Joint European Torus or JET facility in Culham, Oxfordshire. Right now, research is going on here to find a new and sustainable clean energy source.

**Steve Cowley:**

Nuclear energy's a big part of reducing this carbon dioxide output, not only of the UK, but of the world. So it's going to be a big energy source for the next decades. And in the future, it may be the biggest energy source. And I think people need to understand what the issues are, they need to understand a little bit about the science, because there's a lot of misinformation about this. And I think this course is to provide exactly that kind of information that people need to know.