Engineering in the News

Monday 9 November 2026

Three real engineering stories, one debate and a two-minute challenge

Born to Engineer

95 subsea cables now link East Anglia THREE



Image: Karwin Luo on Unsplash

- All 95 inner-array cables are laid at the wind farm about 69 km off Suffolk.
- More than 240 km of cable links 95 turbines of 14.7 MW each.
- The cables run at 66 kV to keep current and heat losses down.

The science behind it

$P = VI$ and $P = I^2R$: double the voltage, halve the current, quarter the heat loss.

Jobs behind the story

Electrical engineer | Offshore wind technician

Bristol students design their own chips

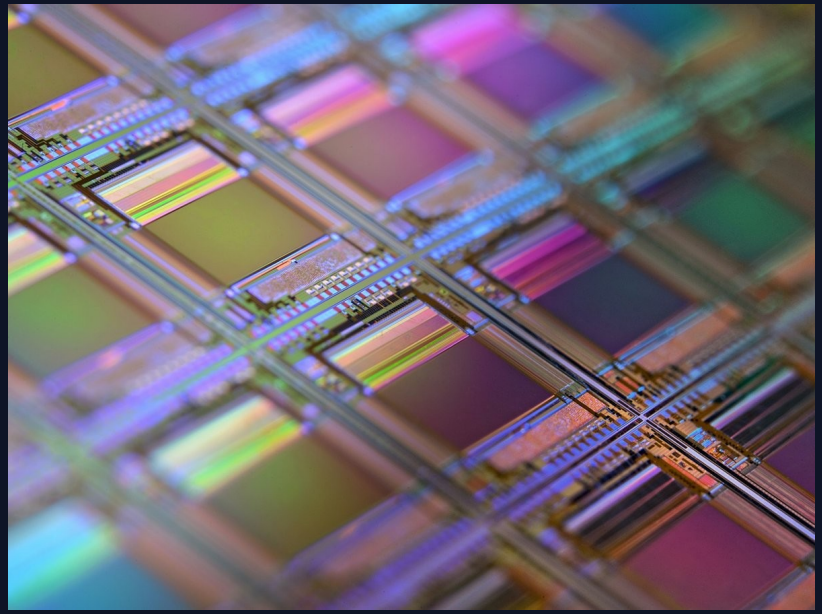


Image: Laura Ockel on Unsplash

- More than 50 University of Bristol students designed chips in one workshop.
- Browser tools from student start-up Vulkos had them designing within five minutes.
- Professional tools can take up to nine months to set up in a university lab.

The science behind it

Logic gates and binary: a 640 × 480 screen at 60 frames a second needs 18.4 million pixel decisions every second.

Jobs behind the story

Electronic engineer | Silicon design engineer

AI was built by a relay race of engineers



Image: Christian Wiediger on Unsplash

- AI was built step by step by many engineers over nearly 70 years.
- 1958: Rosenblatt's perceptron taught itself to sort cards after 50 trials.
- 2012: AlexNet was trained on two graphics cards in a Toronto bedroom.

The science behind it

Learning from mistakes: guess, measure the error, adjust the connections and repeat. An algorithm in action.

Jobs behind the story

Machine learning engineer | Hardware engineer

Five-minute debate

Pick a statement. Half the room argues for it, half against.

1 Offshore wind

Running power cables at a higher voltage is always the better engineering choice.

2 Chip design

Every student should design a computer chip before they leave school.

3 AI

The engineer who makes an idea work deserves more credit than the person who had the idea.

Two-minute challenge: the 66,000-volt cable

1. A turbine sends 14.7 MW down a cable. Older designs used 33 kV; East Anglia THREE uses 66 kV. Use $P = VI$ to work out what happens to the current.
2. Heat lost in the cable is $P = I^2R$. Work out what happens to the heat lost when the current halves.
3. Explain why that matters across 95 turbines.

Answer

1. The current halves.
2. Heat loss falls to a quarter: $(\frac{1}{2})^2 = \frac{1}{4}$.
3. Less wasted energy, cooler cables and more turbines on each cable.

More stories: borntoengineer.com/stem-news

Supports Gatsby Benchmark 4: linking curriculum learning to careers.