

Our vision is for every young person in the West of England to have access to inclusive, engaging and inspiring education experiences to engineer a better future together.



engineeringourfuture@uwe.ac.uk www.digitaltrailblazers.net

This project is funded by the Digital Engineering Technology & Innovation initiative (DETI). DETI is a strategic programme of the West of England Combined Authority (WECA), delivered by the National Composites Centre, in partnership with the Centre for Modelling & Simulation, Digital Catapult, the University of the West of England, the University of Bristol, and the University of Bath. DETI is funded by £5m from WECA, with co-investment from the High Value Manufacturing Catapult and industry.









Engineering a better future

#### Who we are

DETI Inspire is managed by UWE Bristol's School of Engineering with funding from the Digital Engineering Technology & Innovation initiative (DETI).

#### What we do

Encouraging diversity and inclusivity, DETI Inspire engages children in primary and secondary education across the West of England, with a focus on disadvantaged areas.

Using curriculum-linked engineering outreach and careers support, we are connecting children with real-life, diverse engineering role models to widen participation and aspirations for STEM careers.

# **Engineering a sustainable future**

To achieve a zero carbon global economy, everything we make, transport, and power will need to be completely re-imagined and reengineered. This transition to a new economy and society needs to be in partnership with our diverse communities and education networks. We need to employ design thinking to understand the problems, empathise with community needs, imagine creative and collaborative solutions, and prototype and test these innovative ideas in partnership with regional industry and education partners. Working together we can achieve a zero carbon economy for the benefit of all.



### **DETI Inspire Workshops**

All our free workshops are run by trained outreach coordinators and feature real-life STEM Ambassadors and students. We can deliver in your school in the West of England or you can visit our purpose-built classroom at UWE Bristol's School of Engineering.

# **ENGINEERING CURIOSITY** 1 or 2 hours; KS2; KS3

Engineering Curiosity explores engineering careers and opportunities in the West of England. The resource features a set of top-trump style cards, each one inspired by a real-life engineer from the region, with curriculum-linked worksheets to help connect your classroom learning to the skills needed in the working world.

## WE MAKE OUR FUTURE 50 minutes; KS2; KS3

We Make Our Future is a new interactive, educational & entertaining science show which celebrates the ingenuity of human engineering, addresses current issues around climate change and introduces digital engineering as a relevant and attainable aspiration for all young people. This is a presenter-led experience delivered inside Explorer Dome's inflatable planetarium.

#### THE WEST IN MINECRAFT 1 or 2 hours; KS2; KS3

The West in Minecraft educational resources take a digital, play-based approach to engineering using the popular game Minecraft. We support children to develop their own ideas and problemsolving skills, and engage with engineering as a creative and diverse subject that can impact the world around us.

#### **WECOUNT SCHOOLS** 1 or 2 hours; KS2; KS4

WeCount Schools uses Raspberry Pi sensors and coding to support young people to learn about the grand challenges' cities face in relation to urban travel, air pollution and the steps we can take collectively to make their school streets, and cities, safer, healthier and happier.

## **SUSTAINABILITY SOLUTIONS DEBATE KIT** 2 hours; KS4; KS5

How might we reach net zero by 2030? Get your students thinking like an engineer and discussing potential solutions to the climate and ecological emergency with their peers using this debate kit developed using the West of England Climate Action Plan.