# MANUFACTURERS & ENGINEERS OF THE FUTURE

# **STEM PROGRAMME**



**INCORPORATING:** 













NEC BIRMINGHAM – HALLS 4 & 5 6<sup>TH</sup> JUNE 2024, 12:00 - 16:00







PARTNER:

**Every aspect of Smart Manufacturing & Engineering Week** celebrates manufacturing & engineering excellence: expert speakers, industry-shaping influencers, the best manufacturers around the world and the brightest emerging talent.

Brimming with cutting edge content, valuable peer-to-peer interaction and the best products and services available, the co-located live events (Smart Factory Expo, Maintec, Design & Engineering Expo, Drives & Controls, Fluid Power & Systems and Air-Tech) attract over 12,500 manufacturers, engineers, industry leaders and technology solution providers, making it, the largest festival of advanced manufacturing and engineering of the year.

### Why attend?

- · See the future of the manufacturing and engineering sector under one roof.
- · Discover the latest technology from some of the world's largest brands alongside innovative SME's.
- · Find out about the training, development and job opportunities available to you in the UK's second largest sector.
- · Take part in practical workshops and immerse yourself in live demonstration areas and competitions.

### **KEYNOTE SESSIONS INCLUDE:**



### **DESIGN & INNOVATION THEATRE**

1330-1350 - EngineeringUK aims to inform and inspire young people and grow the number and diversity of tomorrow's engineers.



### **DESIGN & INNOVATION THEATRE**

1400-1420 - Bloodhound Education's mission is to inspire a generation to explore and get into STEM as well as raise awareness of STEM careers.

### LIVE ACTION:

### **TECHNOLOGY** SHOWCASE ARENA



The Technology Showcase Arena is a dynamic space serving as an interactive demo area for the latest in wearables, robotics, and beyond.

Come and see technology in action, and get hands on with the latest game changing kit!

### **BEST OF BRITISH SHOWCASE**

Join us in a celebration of domestic manufacturing, featuring worldbeating new designs, innovative modes of manufacture, products that redefine categories, and export successes that plant the flag in overseas markets.

Key companies include:



W verge MasterMover



Druck

### **INSTITUTE FOR** MANUFACTURING DIGITAL LAB

Location: Hall 4-R50



UNIVERSITY OF CAMBRIDGE

demonstrations of some of the latest technology research

from the IfM including:

- · Digital solutions using low-cost technologies
- · Al for process improvement
- · AR technology for assembly training

### INSPIRING THE NEXT GENERATION OF ENGINEERS



JJA Snack invites you on an exciting journey, tracking the chocolatemaking process. This hands-on experience offers unique insights into engineering principles, making learning not only educational but also deliciously fun. JJA Snack's innovative approach equips students with skills and knowledge that align with the evolving needs of the industry, preparing you for future engineering challenges.

Location: Hall 5-G11

### **DON'T MISS:**

T-1-FNY ROBOT - Hall 4-C24



### Meet our resident Robot.

T-1-FNY (Tiffany) inspired by the famous Terminator films. Be intrigued by how AI and object recognition works and laugh at how a 300kg 8ft high robot can be taught to do the ironing!

### **SMOOTHIE BIKES**

Location: G-492



Drop by at the wellbeing nook for a free smoothie! Our Smoothie Bikes harness your pedaling

energy to mechanically power a blender! 30 seconds of pedaling rewards you with a healthy, nutritious drink.

### **SPIN THE WHEEL**

– Hall 5 Entrance



Make sure you stop by and spin the wheel to win prizes including free drinks, massages and other mystery gifts!

### **DOODLE WALL**



Head over to the doodle wall to add your comments, questions, or drawings and help us create a unique piece of art!

### **COMPETITION TIME**

# COMPETE FOR A CHANCE TO WIN A 3D PRINTED GUITAR IN THE GUITAR LEGENDS COMPETITION

Location: Hall 5-C34



Ready to showcase your guitar talents to the world? Play a classic intro to a song in our recording booth and be in with a chance to win a bespoke 3D printed guitar!

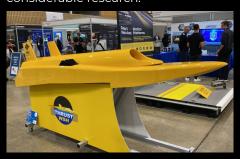
Find out more and how to apply at www.mandeweek.co.uk/guitar-competition

### THE ADVENTURE STARTS HERE



We know what it takes to break records on land – we've set four of them – but the water speed record

is unknown territory. It hasn't been beaten since 1978 and has a deserved reputation for being dangerous. The Thrust Water Speed Hydro Project is designing a high-speed boat capable of breaking the water speed record but in order to do this it requires considerable research.



Come to the stand to talk to team members and help with a new Education Survey. You can even try designing your own boat using a simple version of their design software.

Location: Hall 4-D60

### **INNOVATION ZONE**

# Coventry University



Coventry University are exhibiting with a theme of AI and Future Transport Engineering. Exhibits will include the award winning IMechE Formula Al Car and Formula Student cars developed and raced by a multidsciplinary team of motorsport, electrical and electronic student engineers. Additionally the stand will feature unmanned aerial vehicles designed, and flown by aerospace students in national and international competitions. Additional state of the art technologies include a Hexicoptor, Al Robot Dog, interactive displays and more.

Come talk to the team about how they are preparing students to enter a world with evolving tech and skills sets. They also have their degree apprenticeship team, student recruitment team and current students available to chat to.



PLUS meet Robot Dog Faido capable of 'hearing' and 'seeing' by using AI to sense its environment.



### **MADE SMARTER INNOVATION SHOWCASE**

INNOVATION

Visit the Made Smarter Innovation Showcase to witness how

Innovate UK and its partners are revolutionising UK manufacturing. Together, we're shaping a future that's sustainable, productive, and globally competitive.



### Partners include:

- · Smart Manufacturing Data Hub
- · Digital Supply Chain Hub
- Smart Cobotics Research Centre
- Digital Medicines Manufacturing Research Centre
- · Materials Made Smarter Research Centre
- Research Centre for People Led Digitalisation
- Research Centre for Connected Factories

### **EXHIBITORS NOT TO MISS:**

Location: Hall 4-A116



Showcasing the various roles and positions

available within a manufacturing business, from software engineering, quality control, production to research and development. Get one-to-one guidance with interviews or apprenticeship applications. Plus see a range of aerospace components, a 3D printer and a Microsoft Hololens to demonstrate how this is used in a manufacturing environment.





skills training.

At the forefront uk of delivering world-class engineering apprenticeships and

Visit Stand L21 in Hall 4 and find out why becoming an apprentice is a great choice for young people, from those that have applied.

# **SIEWETTES**

An award-winning social enterprise working to inspire and support girls, young women and non-binary young people into Science, Technology, Engineering, Arts and Maths careers.

Location: Hall 4-S80

# *ELEONARDO*



Location: Hall 4-N104

The winning team from the Apprentice Automation Challenge 2023 are exhibiting their innovative project. Stop by and see them and find out how they will use the knowledge and skills gained in the next steps of their careers.

### **WORLDSKILLS UK NATIONAL QUALIFIERS**



## **FANUC**

WorldSkills UK is an independent charity who are raising standards in apprenticeships and technical education to

enable more young people get the best start in work and life.



They are working with FANUC to host qualifiers for this year,s Industrial Robotics competition at Smart Manufacturing & **Engineering Week!** 

Come and watch the teams complete the tasks set against the clock using their assigned robot cells.

Visit Fanuc's stand - Hall 4-B80 Visit the World skills challenge -Hall 5-D10

### **VISITOR TRAIL**



Our tailored STEM visitor trail will help you navigate your way to the exhibition

stands, Solutions Theatre presentations and networking opportunities of most relevance to you.

Pick up a printed visitor trail map when you arrive or look out for the QR code to download a digital copy.

### **EMANUFACTURER**

Pick up a copy of The Top 100 Awards brochure and the latest issue of The Manufacturer magazine from the TM Studio (Hall 4-C60) to stay up to date with developments in in the manufacturing and engineering sector.

You can also subscribe at themanufacturer.com

### TREE PLANTED FOR EVERY **VISITOR**



In association with our partner Forest Nation,

we have once again calculated the emissions generated from the running of our live shows and to help offset this, have organised the planting of an extra 3,164 trees in our dedicated forest taking the total to 24,847.

Do your bit, register now to join us on our sustainability journey!