

2<sup>nd</sup> December 2025

## Careers at Sedgehill Academy

Dear Parents & Carers of Students in KS4 & KS5,

This Friday, our KS4 and KS5 students will have the exciting opportunity to hear from a microelectronics engineer currently working at MediaTek's UK office. His talk will introduce students to the cutting-edge world of microelectronics — the technology that powers smartphones, computers, AI systems, and so much of modern life.

The talk will begin by helping students understand what microelectronics actually is, showing how tiny, millimetre-sized microchips sit at the heart of devices we all use every day. Through examples ranging from Nvidia GPUs and ARM smartphone processors to Ada Lovelace's early computer programming, the talk will highlight the UK's remarkable history of innovation and its continuing influence on global technology.

The talk will share insights into roles designing radio-frequency microchips for 5G, WiFi and Bluetooth communication — chips used by companies such as Samsung, Sony, Motorola and many others. Students will learn how these designs are created, manufactured and used around the world, and will gain an understanding of why the UK's rapidly growing "Electech" industry urgently needs more young people with strong STEM skills.

Alongside the technical aspects, the talk will address representation in the tech sector, the importance of diversity, and the opportunities available for students from all backgrounds to enter STEM fields.

We are delighted to offer this valuable opportunity and look forward to an engaging and inspiring session for our students.

To facilitate further conversations at home, we also recommend looking at the [STEM Careers - Youth Employment UK](#) website. There is a wealth of information to be found on this page.

Yours sincerely,



**Mr Stuchfield**

Associate Assistant Principal