

## FREE COURSEWARE AND HARDWARE

With the support of Infosys Foundation USA, the Raspberry Pi Foundation has created two new courses for US-based educators, with free kit available

Matt Richardson

n September 2021, the Raspberry Pi Foundation launched two new free online courses for educators in the USA. with the support of Infosys Foundation USA, who are committed to expanding access to computer science and maker education in public schools across the United States.

To kick-start their learning journey, we gave qualified US-based educators the chance to receive a free Raspberry Pi Pico microcontroller hardware kit. We still have kits available to give away, so read on to find out more. You can find both new courses on the Pathfinders Online Institute (helloworld. cc/pathfinders), a platform which supports US classroom educators in bringing highquality computer science and maker education content to their kindergarten through 12th-grade (K-12) students.

## The courses

The first free course is Programming Essentials in Scratch (helloworld.cc/infosys1 - login required). It supports teachers in introducing the essentials of programming to fourth- to eighth-grade students. The course covers the key concepts of programming, such as variables, selection, and iteration. Teachers will also discover how to inspire their students and help them create music, interactive quizzes, dance animations, and more.

The second free course is Design, Build, and Code a Rover with Raspberry Pi Pico (helloworld.cc/infosys2 — login required). It gives teachers of fourth- to eighth-grade students everything they need to start teaching physical computing in their classrooms. Teachers will develop their students' knowledge of the subject by using



basic circuits, coding a Raspberry Pi Pico microcontroller to work with motors and LEDs, and designing algorithms to navigate a rover through a maze. By the end of the course, teachers will have all the resources they need to inspire students and help them explore practical programming, system design, and prototyping. Some teachers have told us what they're hoping to get from the courses and kits, and we've been encouraged to hear comments such as, "My students love learning how to code using blocks and Python, and would absolutely love to see their code in action with physical computing DIY projects!"

## Free kit

Thanks to the generous support of Infosys Foundation USA, the Raspberry Pi Foundation is able to provide qualified educators with a free kit of materials to participate in this second course. This is

particularly exciting because the kit includes Raspberry Pi's first-ever microcontroller, Raspberry Pi Pico (helloworld.cc/pico).

This offer is available to 1000 US-based K-12 public or charter teachers on a first come, first served basis. To claim your kit, just create a free account at helloworld. cc/pathfinders and start the course. On the first page of the course, you'll receive instructions for how to apply for a free kit. If you're not a qualified educator, if you've missed out on the opportunity to receive the free hardware, or even if you're not based in the USA you are still welcome to join the course. You can find the materials yourself, or purchase the kit from our partners at PiShop.us (helloworld.cc/ shoppico). (HW)