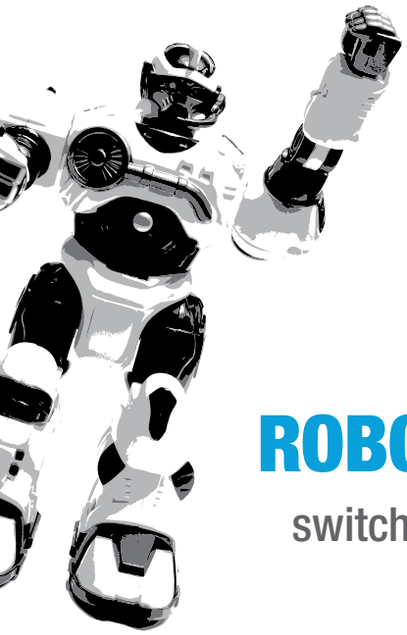

Words // Jenny Rogan

ROBOTICS PROGRAM

switching students on to high-tech CAREERS

Justin Kacho and Kayla Everingham (inset) start their robotics education with microelectronic circuits

"AWESOME" – THAT'S how student Kayla Everingham describes studying robotics.

"I initially thought it was going to be boring and hard but it's been really interesting and it's been something we've been able to do ourselves," Kayla said of her introduction to robotics at Runcorn High.

"It's completely changed my perceptions about technology and about what I want to do as a career.

"Engineering is really something I'm thinking seriously about now because I know I could do it."

Kayla is one of 180 Year 10 students at Runcorn High currently participating in a new K12 Robotics Program developed by the Department of Tourism, Regional Development and Industry's Australian Microelectronics Centre.

The idea of the program is to break down the stereotypes and negative perceptions about studying technology and promote career pathways in electronics.

In this case, it's proving to students that electrotechnology is not only interesting and challenging, but fun.

Robotics exposes students to an array of disciplines including microelectronics, electronics, software programming and mechanical engineering – skills today's students are going to need if they want to take advantage of exciting careers emerging in high-tech industries such as manufacturing, ICT, aviation and defence, mining and biomedical engineering.

For Cecily Gredden, Head of Department, Science at Runcorn High, the response from students has been overwhelming.

"I'm now starting lunchtime classes for those who just aren't getting enough time on robots in class," she said.

Ms Gredden said the students started out building microelectronic circuits. They then moved onto computer programming their own robots to perform simple tasks, followed by the designing of electronic control devices.

"The program is great because there is a lot of support material for the students, they can see results quickly and they have a real sense of achievement," she said.

The school will continue to offer basic electronics and robotics as part of its science program and senior subject, Industrial Technology and Design, where students will get to build their own robots utilising skills such as blow-moulding of the casing, soldering of the circuits and programming of the microchips.

"The Indigenous students in the Leroy Loggins Foundation program are also benefiting from the robotics program," Ms Gredden said.

"Many of these students will get an opportunity to expand their knowledge of robotics and control devices as they design watering and other systems to manage the school's new Indigenous food and medicines environmental area.

"The interest is definitely here now and I'm hopeful we can also establish an industry partnership and really help broaden our students' horizons."

The Department of Tourism, Regional Development and Industry's Australian Microelectronics Centre provides comprehensive support to classroom teachers and students interested in the K12 Robotics Program through teaching aids, promotional materials, teacher development workshops and linkages to TAFE, universities and industry. ■

›› www.amcentre.com.au

The K12 Robotics Program provides real benefits for industry:

- linking with schools to form partnerships as part of a wider recruitment strategy
- identifying potential employees for traineeships and apprenticeships
- supporting technical and engineering skills for the future
- supporting robotics events to raise the profile of the firm.

For more information on the K12 Robotics program contact Steve Rowson, Project Manager, Australian Microelectronics Centre, (07) 3364 0666 or amc@amcentre.com.au