



MacICT presents

# MAKER C.R.E.A.T.E!

Create Reality with Electronics, Art and Technology in Education!



**Students get to take their creations home!**

## Maker C.R.E.A.T.E Student Boot Camps - Suitable for Year 1 to Year 10

Re-discover the art of 'learning by making' and empower your students to tinker, design and make things using recycled materials and consumer electronics.

Students will participate in tactile building tasks and electronic circuit wiring, as well as specific computer coding activities for older students. Program, build and electrify activities will address a real world need, and students can also take their projects home to keep! Total cost is inclusive of all materials required.

Our MakerDay C.R.E.A.T.E! Boot Camps were first inspired by the growing popularity of D.I.Y. building and tinkering projects that have now reached epic proportions in the United States. Research around this phenomenon has, among other things, highlighted that the art of making is inherently a human activity and one that is very satisfying. The resurgence of the 'Maker' movement has expanded to include the ability to code and program for the demands of an increasingly digital and automated world.

### YEAR 1 TO YEAR 6 STUDENTS

This workshop offers students the opportunity to design and create models with recycled materials and integrate with electronic components.

In this workshop we can cover:

- › working with cardboard and engineering a design for a toy or something useful for the home
- › using LittleBits technology
- › creating electronic circuits with consumer electronics
- › making a take-home project.

We can adapt this workshop to the needs of your students. Please let us know if you would like to make any customisations when booking in.

### YEAR 7 TO YEAR 10 STUDENTS

In this workshop students learn to program Arduino development boards to control and interact with their environment. They experience physical computing where their computer program commands make things happen in the physical world.

In this workshop students can:

- › learn about and create electronic circuits with consumer electronics
- › learn to create basic programs in the Arduino language ( a form of C/ C++)
- › learn how to control electronic circuits with an Arduino
- › learn about the types of sensors and actuators that can be controlled by microcontrollers
- › make a real world prototype using an Arduino and recyclable materials.

Optionally, schools can purchase the Arduino Experimenters Kits (\$100 each) for students to take with them for use back in the classroom. Let us know how many kits you would like when booking in.

### HOW TO BOOK

Contact MacICT to arrange a date:

[macictsupport@det.nsw.edu.au](mailto:macictsupport@det.nsw.edu.au)  
(02) 9850 4310

**WHEN** Tuesdays & Thursdays during school terms

**TIME** 9:30am - 2:30pm

**LOCATION** Macquarie University  
North Ryde NSW

### COST AND PAYMENT

**Materials are included in the cost. The cost depends on the year group as the materials are different. Max class size is 25 students and we can take up to two classes in a day.**

**Y1-Y2:** Flat rate of \$600 <sup>inclGST</sup> per class of up to 25 students. We require at least one parent/adult helper per 5 students for this workshop.

**Y3-Y6:** Flat rate of \$650 <sup>inclGST</sup> per class of up to 25 students.

**Y7-Y10:** Flat rate of \$650 <sup>inclGST</sup> per class of up to 25 students. Contact us if you would like to include the cost of keeping the Arduino kits.

Payment by NSW DoE schools is via direct debit by the DoE. Payment by non-DoE schools is via invoice. Your school will be charged after the event. **Note:** any cancellations made within 2 days of the event will incur a \$200 cancellation fee.