

Electronics

INDUSTRY FOCUS AREA:	All
VICTORIAN CURRICULUM LINKS:	Design and Technologies, Personal and Social Capability. Critical and Creative Thinking
TECHNOLOGY USED:	TinkerCAD, Arduino, Electronics
YEAR LEVEL:	Year 9
DURATION:	1 Day
LEVEL:	Beginner - Intermediate
MAX STUDENTS:	30

Introduction

The world around us is populated by electronic devices. We rely on them in all aspects of our lives and use them to (hopefully) make our life easier. Electronic devices have also allowed us to greater automate a wide range of things in our lives using sensors and output. This ranges from automations in the workplaces like robotic arms in factories and mail sorters in post offices, through to devices in our homes like sensor light and alarm systems. Understanding how these components work, and how to build your own electronic devices, is a great way to better understand the technology filled world around us.

Program Summary

Taking part in this program will see students introduced to a range of electronic components. They will learn the difference between inputs and output and how to link these together. They will also be introduced to microcontrollers and the extra power which these can provide to their electronic devices. Students will begin by learning about the components and basic circuits by creating online circuits, before moving on to hardware to create solutions to real industry problems.

Taking part in this program, students will collaboratively:

- Develop their understanding of electronic inputs and outputs
- Develop their understanding of microcontrollers
- Use electronics to create solutions to real world problems

Career Links:

Electrical engineer, electrician, hardware development, mechatronics

