



Make Me Safer

INDUSTRY FOCUS AREA:	Food & Fibre
VICTORIAN CURRICULUM LINKS:	Digital Technologies, Critical & Creative Thinking, Personal & Social Capability
TECHNOLOGY USED:	Robotics, Electronics, Makerspace
YEAR LEVEL:	Year 8 - 10
DURATION:	1 Day
LEVEL:	Beginner
MAX STUDENTS:	50

Introduction

While workplace health and safety continues to be a priority for businesses, there are jobs that always come with an element of risk to the people undertaking them. There are many industries in Gippsland that involve working at heights, in confined space, or with hazardous chemicals. While companies try to reduce these risks through training and safety equipment, the risk is always there while humans are carrying out these tasks. The use of robotics to remove humans from these dangerous environments is one possible solution.

Program Summary

Students will learn about some of the riskier jobs undertaken in the Gippsland area. They will learn about the people doing these jobs and the parts of their jobs that pose the most risk. Based on this information, they will develop and propose a solution to make one of these jobs safer through the use of robotics. Students will use the Thymio robots and peripherals that they build using the makerspace materials to create their solutions.

Taking part in this program, students will collaboratively:

- Identify the risks posed in various Gippsland industries
- Proposed, develop, and test a solution
- Evaluate, debug, and improve their designs

Career Links:

Designers: Electrical Engineer, Building Inspector, Product Tester

Technologists: Programmer, Software Engineer, Web Designer

Artisans: Machinery Operator, Farm Worker, Electrician

<https://www.fya.org.au/wp-content/uploads/2016/11/The-New-Work-Mindset.pdf>

