

Onsite



# Wearable Technology

## Industry Alignment

Students will be exposed to technologies and processes used in:

- Electronics
- Precision Manufacturing
- Programming

### Curriculum Areas Covered

Tech		English		Arts			Humanities			Capabilities		
Science	Design & Technologies	English	EAL	Visual Arts	Visual Comm & Design	Critical & Creative Thinking	Ethical	Intercultural	Personal & Social			
	Digital Technologies			Media Arts	Civics & Citizenship							
	Mathematics			Music	Economics & Business							
	Health & Physical Education			Visual Arts	Geography							
					History							

## Student Work



### Duration

This program can be undertaken on consecutive days or spread over a term.

2 days at Yarra Ranges Tech School.

### Curriculum Level

This program is suitable for students from level 7 to level 10.

Students are introduced to electronics, programming and precision manufacturing techniques.

Using the knowledge gained, and working in teams, students design, test and prototype different ideas for wearable technology to address a user's need.

## Key Learning Objectives

- To gain an understanding of Human-Centred design of wearable technologies
- Utilize computer-aided design software for designing wearables
- Utilize different precision manufacturing techniques for creating prototypes
- To understand electronics and their application to wearable technologies
- To understand how electronics can be coupled with precision manufactured items

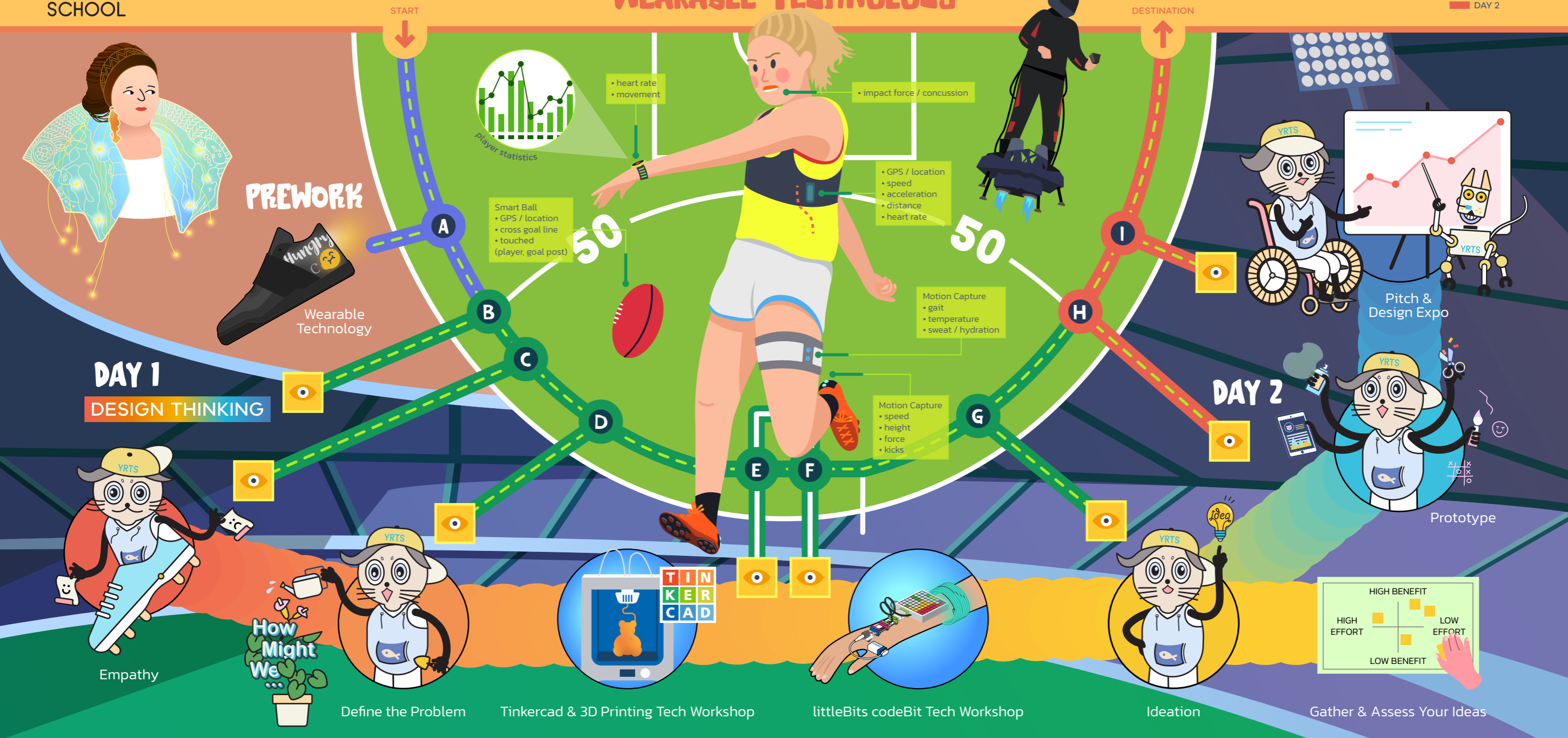
## Technologies Introduced

Students will develop knowledge and skills in:

- Sensor Design
- Coding
- Electronics
- 3D Printing
- 3D Computer-Aided Design Software



# WEARABLE TECHNOLOGY



## Structure of the two days – Day 1

<b>S1</b>	Wearables Technology & Design Thinking overview Choose case study & define problem	<b>L</b>	Lunch
<b>B</b>	Break	<b>S3</b>	Tech workshop – littleBits codeBit Generate ideas Assess ideas
<b>S2</b>	Tech workshop – Tinkercad & 3D printing	<b>D</b>	Depart

## Structure of the two days – Day 2

<b>S1</b>	Review of Day 1 Prototype & test	<b>L</b>	Lunch
<b>B</b>	Break	<b>S3</b>	Pitch – Presentation Pack up & survey
<b>S2</b>	Prototype & test Pitch – What is it?	<b>D</b>	Depart