# TECH SCHOOL



# Health Science

INDUSTRY FOCUS AREA: Health

VICTORIAN CURRICULUM LINKS: Y7 – 10 Health and PE, VCE Physical Education, Food and Technology,

Digital Technologies, Personal & Social Capability

**TECHNOLOGY USED:** Motion capture technology, movement analysis software, VO2 max

testing, HR monitors, food analysis and Virtual Reality experiences.

YEAR LEVEL: All DURATION: 1 Day

LEVEL: Intermediate

MAX STUDENTS: 30

#### Introduction

So how do we know what the best treatment is for someone with asthma? Why is obesity such a problem for a person's health? What foods are recommended for someone with Diabetes? How can we improve someone's movement with Cerebral Palsy? How do we know the effect of different treatments on these conditions?

Health Sciences are constantly evolving by using technology to examine and change the function of the human body. Health professionals rely on specific testing and evaluation of data to assess, diagnose, and treat different health conditions. The use of technology in Health and Food science is expanding and allowing ongoing advances in improving health and wellbeing across the globe.

## **Program Summary**

This program allows students to explore real life case studies relating to health and wellbeing. Students will use available technology to assess and analyse common conditions such as asthma, cerebral palsy, heart disease, diabetes, and obesity as well as examining the effect on body function as a result of these conditions. Students will be able to use movement analysis software, food testing equipment, and virtual reality experiences to view and understand the effect on the body in these conditions and consider how modern technology can be used to help manage these disorders.

## Taking part in this program, students will collaboratively:

- Experience virtual reality anatomy programs to explore and understand how different conditions effect the human body.
- Use food testing equipment to examine the effect of diet on the body.
- Understand how health science can be applied to treat different conditions.
- Collect and interpret movement data using movement capture technology.
- Learn how to apply collected information to real life scenarios.

#### Career Links:

Careers: Medical science, Exercise Physiologist, Physiotherapist, Occupational Therapist, Sports Scientist, Prosthetist. Dietician, Food scientist.

