

BENDIGO
TECH
SCHOOL



3 DAY PROGRAM

Agriculture - Tech Tilling our Futures

Help a real person in Bendigo's agricultural industry with an innovative tech solution!



LA TROBE
UNIVERSITY



Education
and Training

Agriculture - Tech tilling our futures

Help a real person in Bendigo's agricultural industry with an innovative tech solution!

Duration

3 Days

9:30 am – 2:30 pm

Dates

Commencing

January 2019

Learning Program Overview

Working in teams (5-6 per team), students will use the Design Thinking process to creatively solve a problem using robot or drone technology, in response to a local person working in Bendigo's agricultural industry. Students will develop "persona profiles" to enable deeper understanding of their end users' situations, to ensure their solution accurately addresses the needs of that person. Using the Design Thinking process, each student team will pitch their solution to the room, receive feedback, and then potentially be selected to pitch the idea to the actual stakeholder they were originally working to help. Students will discover mathematics, engineering, science, and business challenges.

Throughout this three-day program, students will continually revisit their problem definition and employ the design process discovered in earlier programs. Students will refine their collaboration, decision making and communication skills. The program is student-directed and encourages deeper understanding and critical thinking around some specific challenges currently facing people in Greater Bendigo. It is also structured so as to develop students' listening skills and provide an opportunity to actively participate in their local community.

Learning Program Timeline

DAY 1: Empathise + Define – students learn and apply the design process and skills for constructive group dynamics, empathy activities, how to research, potential solutions discussed in groups.

DAY 2: Ideate + Prototype – revision of solutions for specific problems, distribution of responsibilities amongst group members, knowledge sharing, prototyping.

DAY 3: Test + Pitch – further refinement of prototype solution, communication methods for pitching established, groups pitch solution and developmental process taken, feedback, reflection.

Success Criteria

- Work with other team members to comprehensively and collaboratively define the stakeholder's problem.
- Development of a human-centered design solution addresses stakeholder requirements and could be implemented with specific robot or drone technologies.
- Presentation of a pitch to explain and clearly communicate how this stakeholder will be able to implement the solution.

Outcomes - School Links

Year 8 - 10

- Economics and Business – explores the ways in which individuals, families, the community, workers, businesses and governments make decisions in relation to the allocation of resources. They learn how current decisions and actions will shape future consequences and are encouraged to think critically about probable and preferred futures.
- Design and Technologies – students create quality designed solutions across a range of technologies contexts using engineering principles. Encourages students to consider the economic, environmental and social impacts of technological change.
- The Humanities – exploration of the ethical, geographical, historical and religious frameworks and the complex interrelated processes within and between these that have shaped the modern world and which continue to evolve with people.
- Science – student inquiry into real-world problems introduce science as a human endeavour and leverage understanding, knowledge and skills through which they can develop a scientific view of the world.

VCAL

- Literacy Skills – reading, writing and oral communication.

Make a Booking

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