

TECH TASTER

ROBOTICS AND AUTOMATION



CODE, CREATE AND AUTOMATE!

Automation is at the core of all modern production and manufacturing. Using microcontrollers and Dobot, introduce your students to the world of **robotics** and **automation**.

Students learn how to break down **complex problems** into manageable tasks, exploring the link between written tasks, coding and automation.

This program is ideal for developing **computational thinking, problem-solving**, and **future-ready** skills in robotics and automation that are increasingly important in the fields of manufacturing, logistics, engineering, and healthcare.

Industry Links

- Automation
- Robotics
- Manufacturing
- Engineering
- **Mechatronics**
- Programming

Student Outcomes

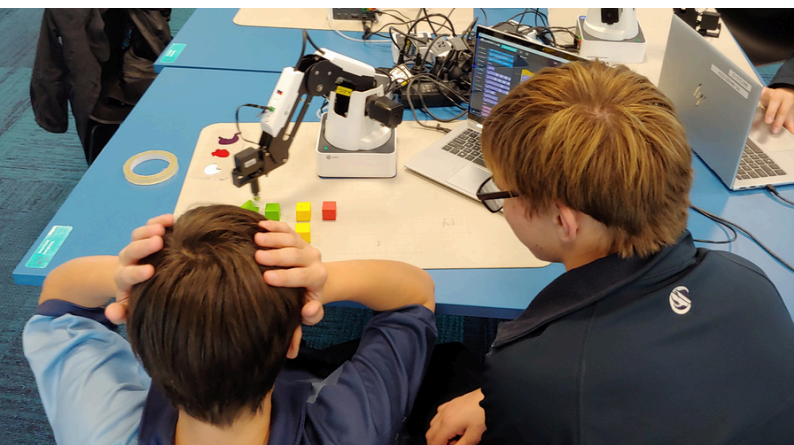
Engage Session

- **Explore** fundamental components of a robotic system, including sensors, outputs and microcontrollers.
- **Create** and **run a basic program** to control the movement or function of a robot or microcontroller.

Create Session

- **Design** and **assemble** a microcontroller to perform a specific task (e.g. object detection).
- **Troubleshoot** a **complex program** to automate a robot's actions based on sensor inputs.

What do students and teachers say about BNTS programs?



"Seeing the robot respond to my program made me understand the link between logic and action."

Student, Montmorency Secondary College

"I used to think that coding was just words without much sense. Now I think that coding is writing instructions to control something real."

Student, Parade College, Bundoora



"I noticed students looking at their prototypes through a user's eyes, asking, 'What do people see first, and what might they want to do next?' That shift to thinking like a designer was powerful."

Teacher, Bundoora Secondary College



Looking for an option to *deepen the impact* for your students?

This program can run across **two days**, allowing for extended projects, collaboration, and reflection. **Contact our team** to design a **two-day visit** tailored to your learners.

