



# Robotics and Coding Courses Aerobotics Global

## Is robotics the future?



# 7 million

More than 7 million Australians are at risk of having their jobs either automated out of existence or augmented by robots and artificial intelligence in the next 15 years, data modelling commissioned by the Australian Computer Society has found.

And while many new jobs will also be created by technology, we are entering a period of rapid transition.

**It's not too late, let's act on it NOW.**

## Prepare for an exciting tomorrow



Aerobotics Global encourages students to apply critical and creative thinking to technology. Implement the learnings of mathematical understanding, fluency, reasoning, modelling and problem-solving to build projects. Understand the concepts of digital technologies and be a lifelong learner.

## What we can offer

While every school wants to bring in robotics and coding for their students, many face challenges with resources, robotic kits and other technical challenges.

We bring you the courses, the robotic kits and educators for up to three years. Our engineers and educators are constantly reviewing and updating our offering to ensure that we bring you the latest technologies and knowledge.

The course can be embedded into the school curriculum, extracurricular activities or after school program.

We can also offer PD & Coaching, Incursions or anything to fit your needs in robotics and coding.

**The courses and the kits are best suited for students in Year 2 and above.**

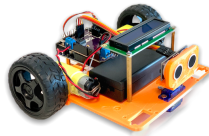
# First Year Course Structure



## Foundations of Robotics

- Introduction to Robotics
- Introduction to Coding
- IR sensor
- DC Motors
- Arduino Uno
- Motor Driving Board

**Term 1**



## Path Finding Robot

- Liquid Crystal Display
- Ultrasonic Sensors
- Servo Motors
- Mathematical calculations
- Real life scenario based problem statements

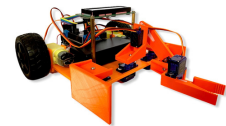
**Term 2**



## The Soccer Bot

- Bluetooth Module
- Wireless Controller
- Servo Motors
- Soccer Flaps
- Wireless communication
- Data transfer through wireless communication.

**Term 3**



## The Emergency Bot

- Robotic Arm
- Servo Motors
- Complex algorithm
- Complex calculations
- Wireless communication of string and integer values
- Variable conversions

**Term 4**

# Proposed options

## Option 1 : Kits and support

You run the course. We provide the robotics course structure, kits and quarterly training to your teachers.

School provides the computer lab and storage facility.

## Option 2 : Kits and educators

The course is completely managed by us. We provide kits and run the course. Our educators maintains all the standard and code of conduct as per the school policy.

School provides the computer lab and storage facility.

## Option 3 : Kits and educators and the resources

The course is completely managed by us. We set up robotics lab, computers, essential tools, kits, and run the course. Our educators maintain all the standards and code of conduct as per the school policy.

School provides a basic classroom for us to set up the lab. The basic classroom includes storage units and furniture.

# Key student take-aways



## Each student gets his/her own robot along with:

Unique progressive course structure allowing ongoing engagement with a learning pathway.

Each student gets to build their robots from components designed by our engineers at ABG.

Students have an opportunity to participate in technology based competitions across Australia.

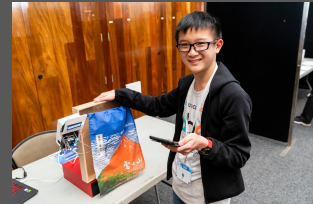
Students can take their robots home so they can practice, rebuild and explore the unlimited potential of open source development platforms.

Students are in safe hands with our qualified educators. Our educators are WWCC and First Aid Certified.

A technology-driven learning experience that will teach them all the skills they need to thrive in the ever-changing world that lies ahead of them.

# Each year our students participate in various science competitions

## Our Winners & Participants of 2019-2020



**BHP Foundation**  
**Science & Engineering Awards**





# Some schools onboard with us



**TOORAK COLLEGE**  
Mount Eliza



**AUBURN SOUTH**  
PRIMARY SCHOOL



**Camberwell Girls  
Grammar School**  
An Anglican School



**HAILEYBURY**

*and more...*

# Cost

**The yearly cost may vary between \$450 - \$1000 per student depending upon number of factors**

- Proposal options
- Total number of students
- Number of days our educators are required in school

**Let's set-up a quick meeting to plan and discuss this in detail**

**Simran Dhindsa**

**0434948355**

**[simran.d@aeroboticsglobal.com](mailto:simran.d@aeroboticsglobal.com)**

# Testimonials

"Outstanding program! Our son has loved it and learned so much these last two years, even winning several VIC science competitions with his robot inventions. And heaps better than basic Lego robotics and 'drag-and-drop' coding. ABG is the real deal, feeding our son's passions and excelling his STEM education, while having fun. There's nothing better!"

Robert Gallup, Parent (Hawthorn East)



"Aerobotics started at our school earlier this year in response to a need to provide students who have a passion for robotics and coding with a more advanced option as part of an after school program initiative. I have to say that the program is been a great success within the school, we are really pleased to see students extremely engaged in the program. Team from Aerobotics have done representation at school assemblies, and have really engaged kids in different ways which they can engage in more advanced tech skills, articular in and around the coding and robotics area. I can surely recommend them to your school, the trainers are great communicators and really are committed to delivering the best possible services to the kids and their families."

Marcus Wicher, Principal (Auburn South PS)



"ABG program is very structured and educational. He is not only learning robotics but also at the same time learning coding. My son is always being encouraged to be innovative and he has created something that is useful in our daily life. With the product that he has created, he achieved 3rd place in the Youth ICT Explorers. Every week my son is learning robotics as if he is in the real working world and he loves it and appreciates it very much."

Stephanie Chin, Parent (Doncastor)



"Aerobotics Global have been running a Robotics Program at Haileybury for over a year and it has been very successful. The coursework is engaging for the students and they are learning valuable life skills, such as coding, resilience and problem solving. The program caters to students with varying familiarity with robotics and each unit builds upon the knowledge learned in previous terms. The Aerobotics Global staff are approachable and quickly build a rapport with their students. They also provide feedback to the students' parents regarding their progress. I would definitely recommend this program to other schools and organisations looking to broaden their extra-curricular programs."

Claire Harvey, Teacher and Program Coordinator (Haileybury)



# Special offer when you mention ASTA



To receive a member discount you need to be a current financial member of your local Science Teacher Association and will need to confirm your membership details.

## DISCOUNT VOUCHER MEMBERS **\$20**

This voucher provides you with a \$20 discount per student for either a course or kit purchased through Aerobotics Global.

This voucher is not redeemable with any other offer and can only be used once.



**AUSTRALIAN SCIENCE TEACHERS ASSOCIATION**

[asta@asta.edu.au](mailto:asta@asta.edu.au) | 02 6282 9377 | [www.asta.edu.au](http://www.asta.edu.au)

## DISCOUNT VOUCHER NON - MEMBERS **\$10**

This voucher provides you with a \$10 discount per student for either a course or kit purchased through Aerobotics Global.

This voucher is not redeemable with any other offer and can only be used once.



**AUSTRALIAN SCIENCE TEACHERS ASSOCIATION**

[asta@asta.edu.au](mailto:asta@asta.edu.au) | 02 6282 9377 | [www.asta.edu.au](http://www.asta.edu.au)



**We believe robots inspire a natural curiosity in students and children.**

With expert training, we can naturally create interest in STEM that is closely aligned to Australian curriculum and help them to grow skills they need prepare for future technologies.

## **Our Mission**

**To teach students how to  
innovate using technology  
by showing them STEM at work.**

Thank you.

1800237626

[www.aeroboticsglobal.com](http://www.aeroboticsglobal.com)

Robotics Program for Students

